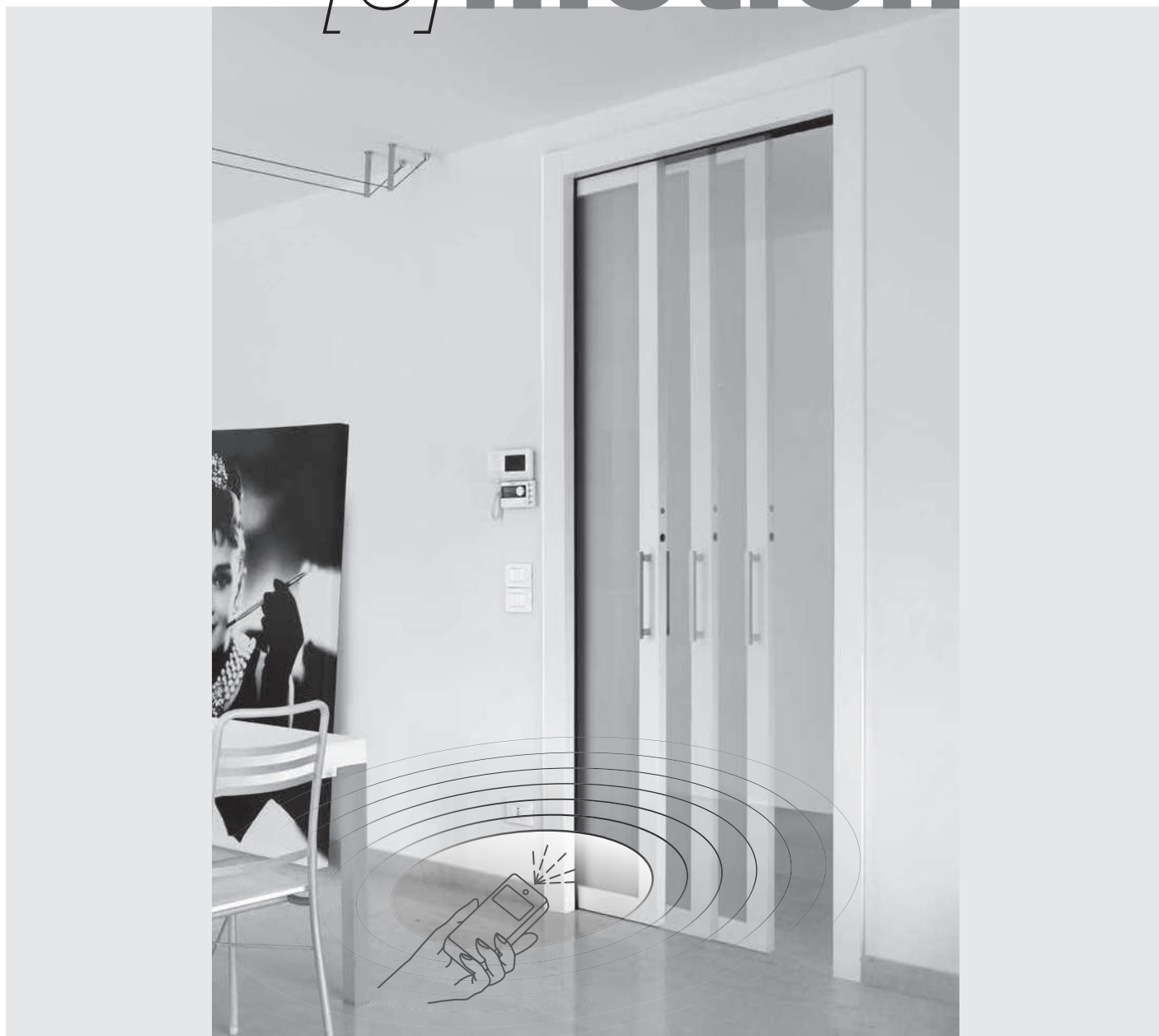


# [e]motion



## Operating Manual, Use and Maintenance

Automatic guide E-Motion for a single automatic sliding door Pocket sliding system UNICO, LUCE SD, UNILATERALE, EWOLUTO®

## INDEX

0.	INTRODUCTION .....	2
1.	DETAILS .....	3
2.	TECHNICAL AND ASSISTANCE DATA .....	5
3.	DEMOLITION AND DISPOSAL .....	8
4.	PART I . OPERATIONG MANUAL .....	9

### 0. INTRODUCTION

Dear client,

We would like to thank you for your trust in Eclisse, for buying this new and innovative automatic guide, E-motion, which can be installed in our pocket systems UNICO, LUCE SD, UNILATERALE, EWOLUTO®.

Eclisse products are all designed and developed following special production models and they are based on need. This is how we guarantee outstanding performances, simple installation and easy use.

This manual contains important information, needed for a correct and safe installation of the automatic guide. We would like you to read the operating and use instruction carefully before installing and using E-motion automatic guide.

Yours sincerely,

ECLISSE S.R.L.



Luigi De Faveri

## 1. DETAILS

This manual has reference to:

- Installation
- Use and maintenance

Referring to E-motion automatic guide.

The installation part is limited ONLY to the technical qualified staff.

### 1.1 GENERAL WARNINGS



Before installing, using or making the maintenance of E-motion automatic guide, we require you to read and understand this manual.

This document is a part of the automatic guide and it must be kept by the client or by the user for future consultations.

This manual means to give all the needed instructions, in order to guarantee correct installation and maintenance.

Eclisse Srl reserves the right to modify and improving the manual and described product in any moment without notice.

The data presented in this document has been prepared and controlled carefully, but Eclisse Srl deny liability for any inaccuracies due to press or transcription mistakes or excisions.

E-motion automatic guide, when installed in pocket system, is to all intents and purposes a machine, as described in Directive 2006/42/EC on machinery.

The complete analysis of safety and health protection, as described in the Directive on machinery, is valid only if:

- All procedures described in the manual have been correctly respected;
- The type of installation corresponds to the one illustrated on the manual.

**Any procedure or action undertaken on administration, installation, functioning, maintenance and use of the machine which is not expected and described in this manual, won't be included in this analysis, this way Eclisse Srl is not responsible. The fitter will take charge for the essential safety and health protection requirements.**

## 1.2 GENERAL RULES



E-motion automatic guide is designed exclusively for pocket sliding systems automation used by Eclisse pocket sliding systems for single door.

It cannot be used for aims that are different from the ones described in this manual.

E-motion automatic guide has been designed and developed respecting all Norma EN 16005 "Automatic pedestrian doors-Safety in use" requirements.

E-motion has been designed to work correctly with a maximum weight of 80 kg per door.

Eclisse Srl denies any liability for any harm or damage.

Any alteration or substitution of parts or components of the guide, and the use of accessories or materials that are not original, almost raises the risk so the producer denies any civil or penal liability.

It is forbidden to remove and/or change the directions and the signposting or accessories placed on the automatic guide by the producer.

It is forbidden to stay in the sliding zone of the doors or operate near the moving mechanic parts.

## 1.3 GUARANTEE



Guarantee lapses if the use of E-motion automatic guide doesn't respect the instructions and the rules illustrated in this manual and if components, accessories, spare parts and control systems non-provided by Eclisse are used.

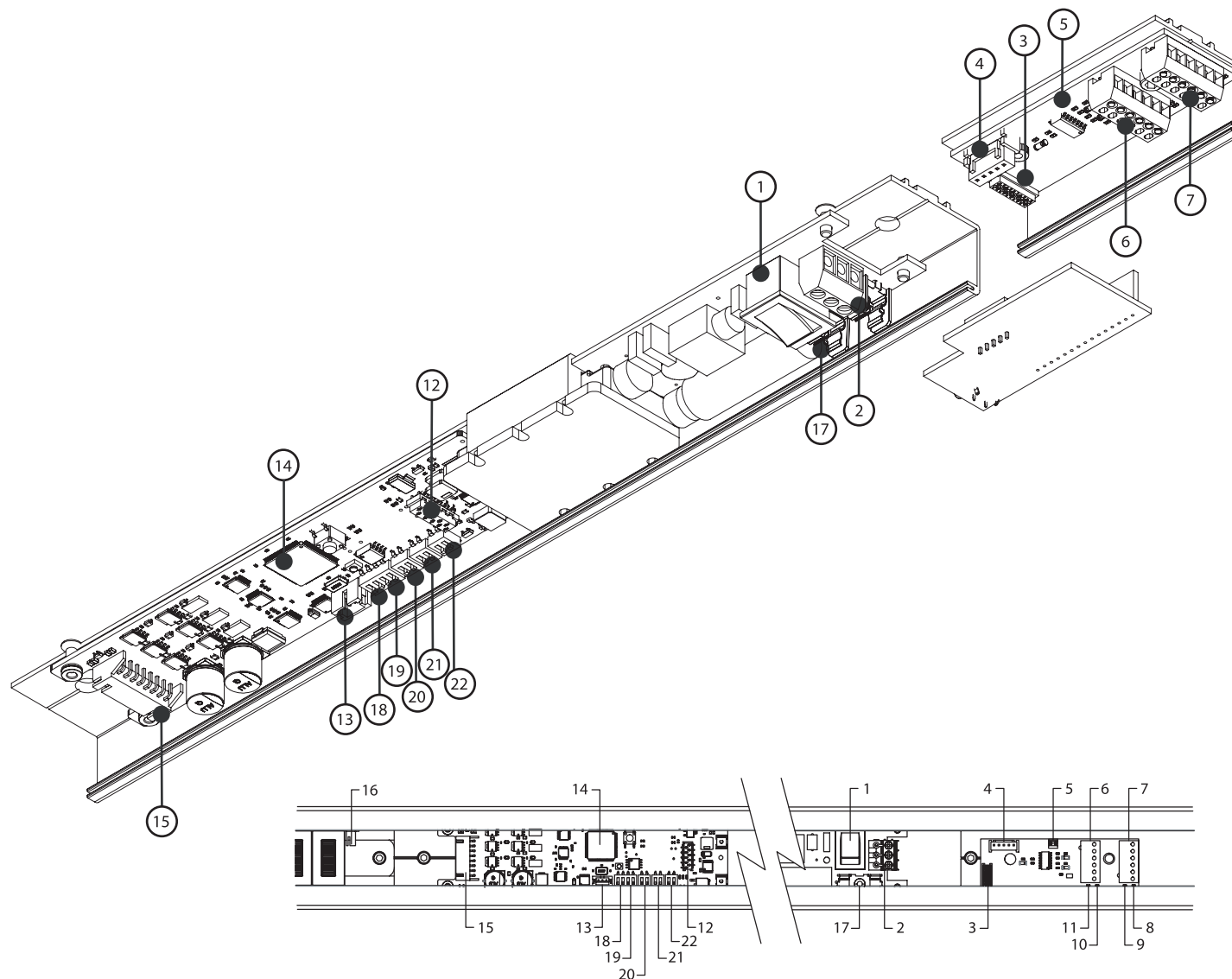
## 2. TECHNICAL DESCRIPTION

### 2.1 TECHNICAL DATA E-MOTION GUIDE – MECHANIC

DIMENSION		PARAMETER E-MOTION GUIDE						
Width	52 mm	Passage Size (mm)	Guide Length (mm)	Track Length (mm)	Opening Speed	Closing Speed	Guide Weight (kg)	
Height	58 mm	700	1420	735	Variable regulation 0,20 - 0,70 m/sec.	Auto regulation complies with EN 16363 "Low Energy" (**)	8,0	
DOOR WEIGHT		750	1520	785			8,5	
Minimum	0 kg	800	1620	835			9,0	
Maximum	80 kg	850	1720	885			9,5	
OTHER DATA		900	1820	935			10,0	
Noise	< 50 db	950	1920	985			10,5	
Use	Continuo	1000	2020	1035			11,0	
N° Cycles	> 1.000.000	1050	2120	1085			11,5	
REGULATION		1100	2220	1135			12,0	
Re-opening sensitivity		1150	2320	1185			12,5	
Opening speed		1200	2420	1235			13,0	
Door opened time 0 - 20 sec.		1250	2520	1285			13,5	
		1300	2620	1335			14,0	
		DOOR WEIGHT (kg)		10	20	30	40	50
		(**) Closing Speed (m/sec.)		0,57	0,40	0,33	0,28	0,25
				60	70	80	0,23	0,21
								0,20

### 2.2 TECHNICAL DATA, E-MOTION GUIDE – ELECTRIC CHARACTERISTICS

ELECTRIC CHARACTERISTICS	
Input	Voltage: 230 V AC – 50/60 Hz Intensity: 1 A Fuse protection: 2,5 A Input cable: 3x1,0 mm <sup>2</sup> Length: 2m.
Power / Consumption	Medium: 80w Peak: 150w Stand-by: 15w
Electric motor	Model: Linear PMSM Motor - Permanent magnet synchronous linear motor with Iron core. N° Poles: 4 Pitch poles 50mm. N° Phases: 3 Voltage: 24 V DC – 5 <sup>a</sup> Magnet: Neodymium 35H Force <80 N
Control	Type: Microprocessor type DSP for vectorial control of movement. Course auto-learning. Door weight auto-learning.
Accessories	Voltage: 24 V DC Intensity: 1 A
Functioning temperature	Minimum: 5° C - Maximum 60° C



- 1 ON/OFF Button
- 2 Power supply input 220V-50 Hz
- 3 Accessories circuit connection
- 4 RF receiver connection
- 5 Domotics connection (reserved)
- 6 External radar and lock connection
- 7 Internal radar and buttons connection
- 8 Green led (internal radar signal active)

- 9 Orange led (button signal active)
- 10 Green led (external radar signal active)
- 11 Red led (lock signal active)
- 12 Accessories circuit connection
- 13 PC connection (reserved)
- 14 Microprocessor
- 15 Motor/ receiver connection
- 16 Motor/ receiver connection

- 17 Protection fuse 2 A
- 18 Operation
- 19 Regulation of opening speed
- 20 Regulation of closing sensitivity force
- 21 Regulation of door opened time
- 22 Dip switches (door Weight)

## ELECTRIC CHARACTERISTICS

### Power supply

Voltage	<b>230 V AC</b>
Power	<b>150 W</b>
Intensity	<b>0,75 A</b>
Frequency	<b>50/60 Hz</b>

### Normative



2006/42/CE  
2004/108/CE  
2006/95/CE  
EN 60335

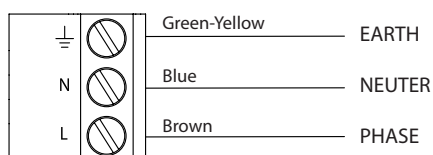
### Linear Motor

Type:	<b>"PMSM" Permanent magnet synchronous motor</b> <b>Iron core. 3 Phases - 4 Poles - 24 V</b>			
Magnets:	<b>Neodymium 35 H</b>		<b>Pitch Pole 25 mm</b>	
Consumption:	<b>Peak</b>	<b>150 W</b>	<b>Force:</b>	<b>80 N</b>
	<b>Medium</b>	<b>80 W</b>	<b>IP:</b>	<b>IP 22</b>
	<b>Stand-By</b>	<b>15 W</b>	<b>Class:</b>	<b>I</b>

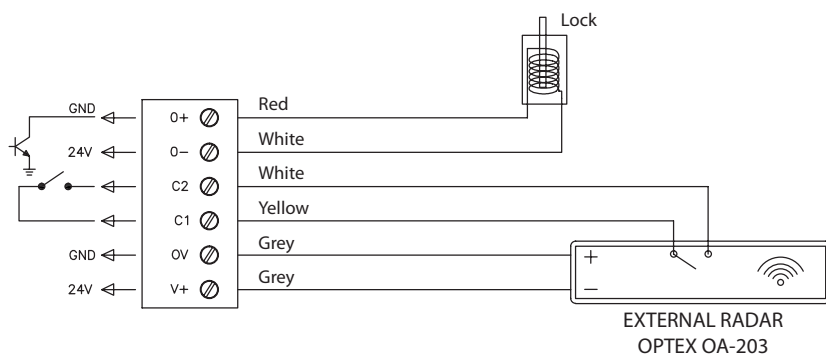
### Accessories

Power:	<b>25 W</b>	Power supply	<b>24 V DC</b>
		Consumption	<b>1 A</b>

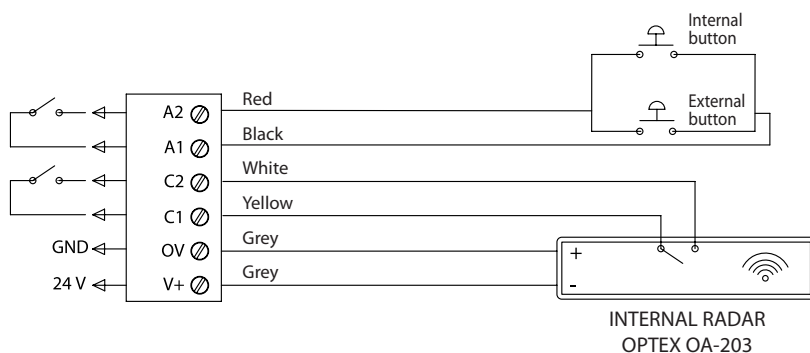
## ② → POWER SUPPLY INPUT



## ⑥ → EXTERNAL RADAR AND LOCK CONNECTION



## ⑦ → INTERNAL RADAR AND BUTTON CONNECTION



### 3. DEMOLITION AND DISPOSAL



#### PACKAGE DISPOSAL

Package components can be assimilated to municipal waste and they can be disposed of without any difficulty, simply doing the waste separation for recycling.

Before proceeding we advise you to verify the specific directives, in the installation place.

**DO NO POLLUTE BY TOSSING THIS CONTAINER AFTER USE!**



#### PRODUCT DISPOSAL

Our products are made of different material. Most of them (aluminium, plastic, iron, electric cables) can be assimilated to municipal waste. They can be recycled by the waste separation and disposal in the authorized centres.

Other components (printed circuit board, radio control's batteries etc.) could contain pollutants.

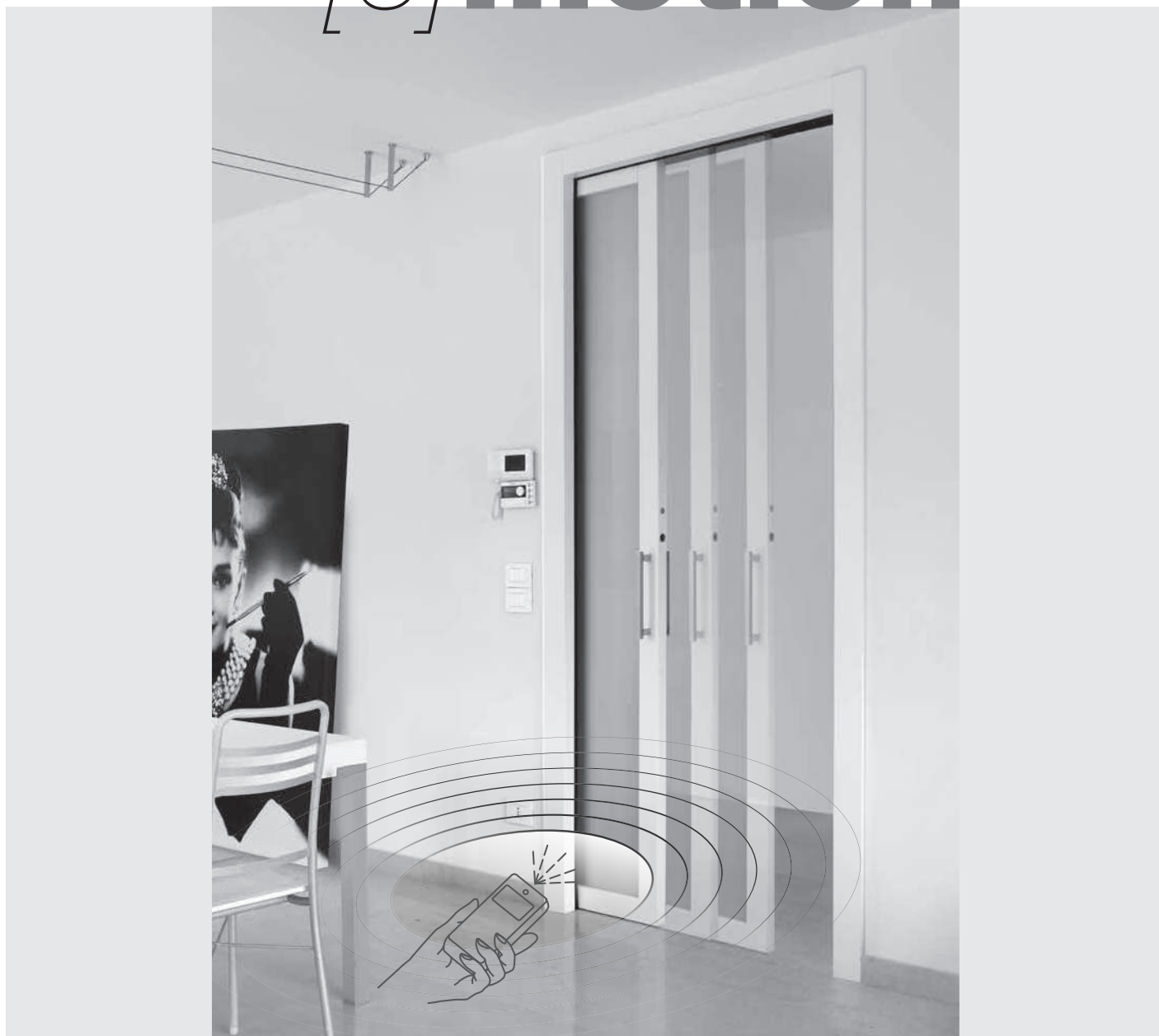
These one should be removed and given to companies entitled to recovery and disposal of waste.

Before proceeding we advise you to verify the specific directives, in the disposal place.

**DO NO POLLUTE BY TOSSING THIS PRODUCT AFTER USE!**



# [e]motion



## PART I

### Installation Manual

Automatic guide E-Motion for a single automatic sliding door Pocket sliding system UNICO, LUCE SD, UNILATERALE, EWOLUTO®

# INDEX

1.1	INTRODUCTION .....	10
1.2	RISK ANALYSIS .....	10
1.3	PRE-INSTALLATION OPERATIONS .....	11
1.4	INSTALLATION PHASES .....	11
1.5	FINAL CHECK .....	36
1.6	INSTALLATION DECLARATION OF CONFORMITY.....	37

## 1.1 INTRODUCTION

This part of the manual is dedicated to qualified installers only.



Before installing automatic guide E-motion this part of the manual must be read and fully understood.

The installation of E-motion automatic guide must be performed by competent technical staff in possession of technical tools required by the law in the place of installation.

## 1.2 RISK ANALYSIS

Below is the table with details of the different phases of installation, risks and safety measures to be taken:

N°	Fase	Rischi	Misure di protezione
0	Guide disassembly	Cut - Crushing	Gloves
1	Description of E-motion automatic guide	Cut - Crushing	Gloves
2	Rear stop regulation	Cut - Crushing	Gloves
3	Cover disassembly	Cut - Crushing	Gloves
4	Guide installation in the pocket system	Cut - Crushing	Gloves
5	Electronic components	Cut - Crushing	Gloves
6	Accessories' test and connection	Cut - Crushing	Gloves
7	Functioning test	Cut - Crushing	Gloves
8	Cover assembly	Cut - Crushing	Gloves
9.a	Glass doors installation	Cut - Crushing	Gloves - Accident prevention shoes
9.b	Wooden door installation	Cut - Crushing	Gloves - Accident prevention shoes
10	Commissioning ON	Cut - Crushing	Gloves

1.3 PRE-INSTALLATION OPERATIONS

Read the manual before installation: it is important for your safety to respect the instructions in this document. Improper installation can cause serious injury.  
Make sure the installation area is closed to unauthorized persons.  
During installation and maintenance, use accident prevention equipment.

Make sure that the package includes all the necessary components for the guide assembly and that they are in good condition. Prepare all the required tools for assembly.

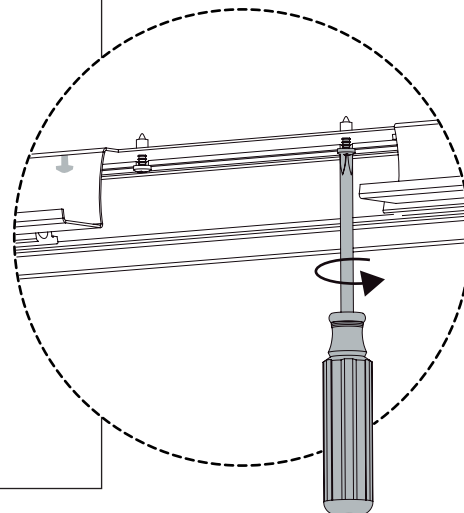
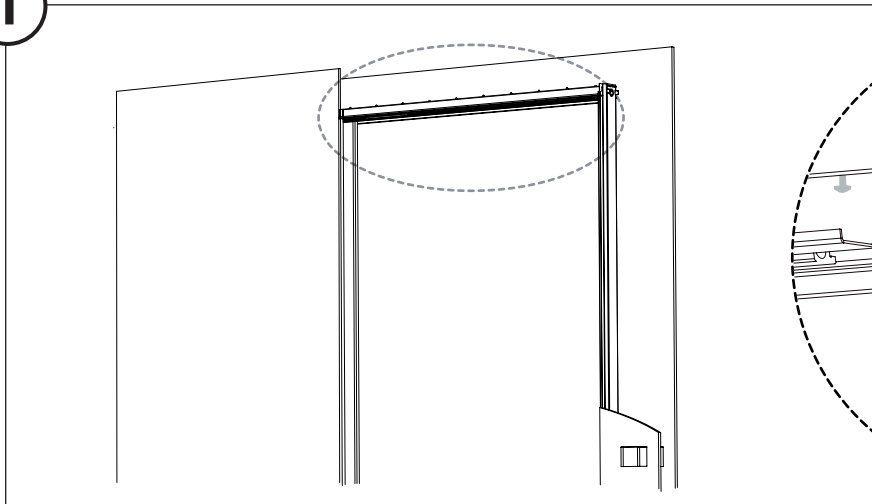
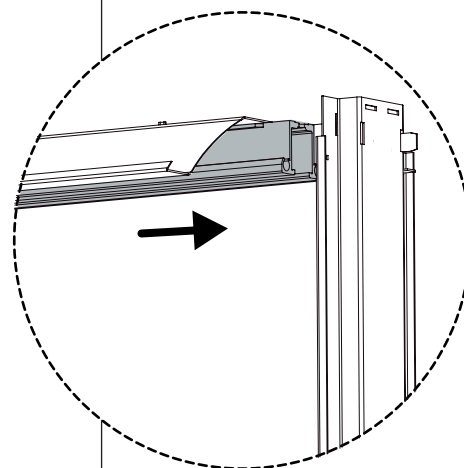
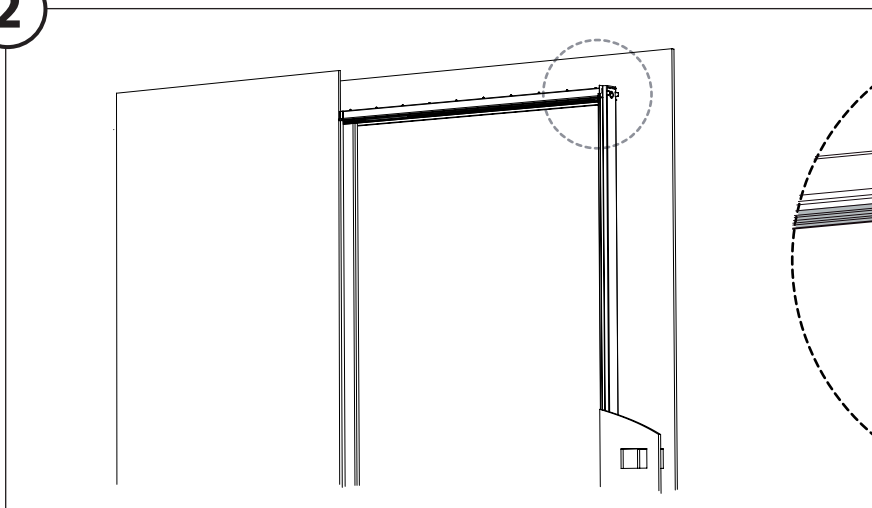
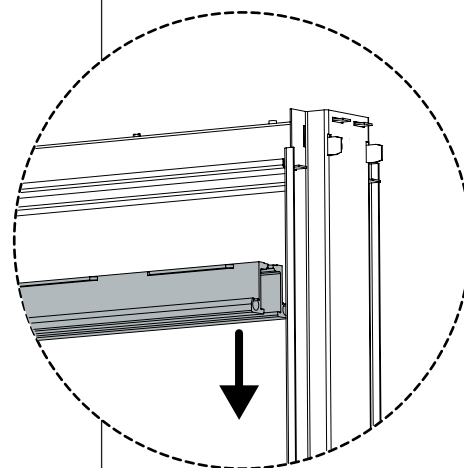
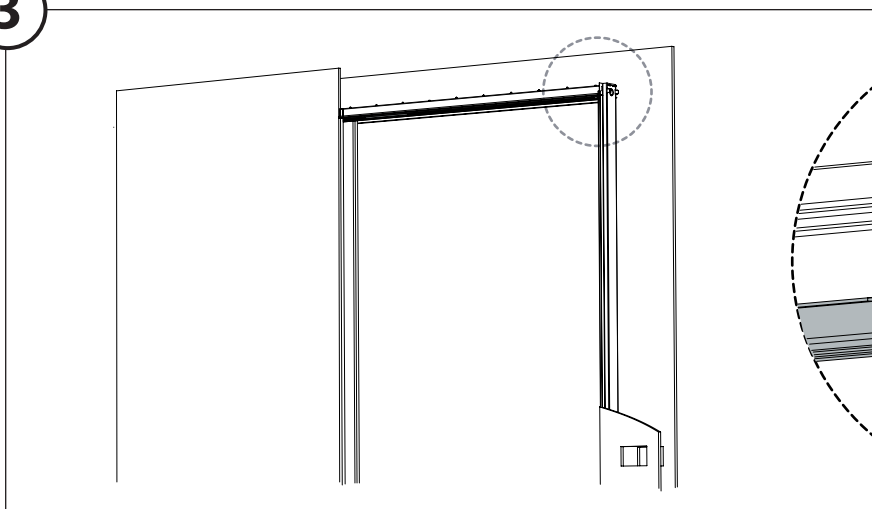
During assembly and connection make sure to operate without tension.

1.4 INSTALLATION PHASES

Usually these are the installation phases:

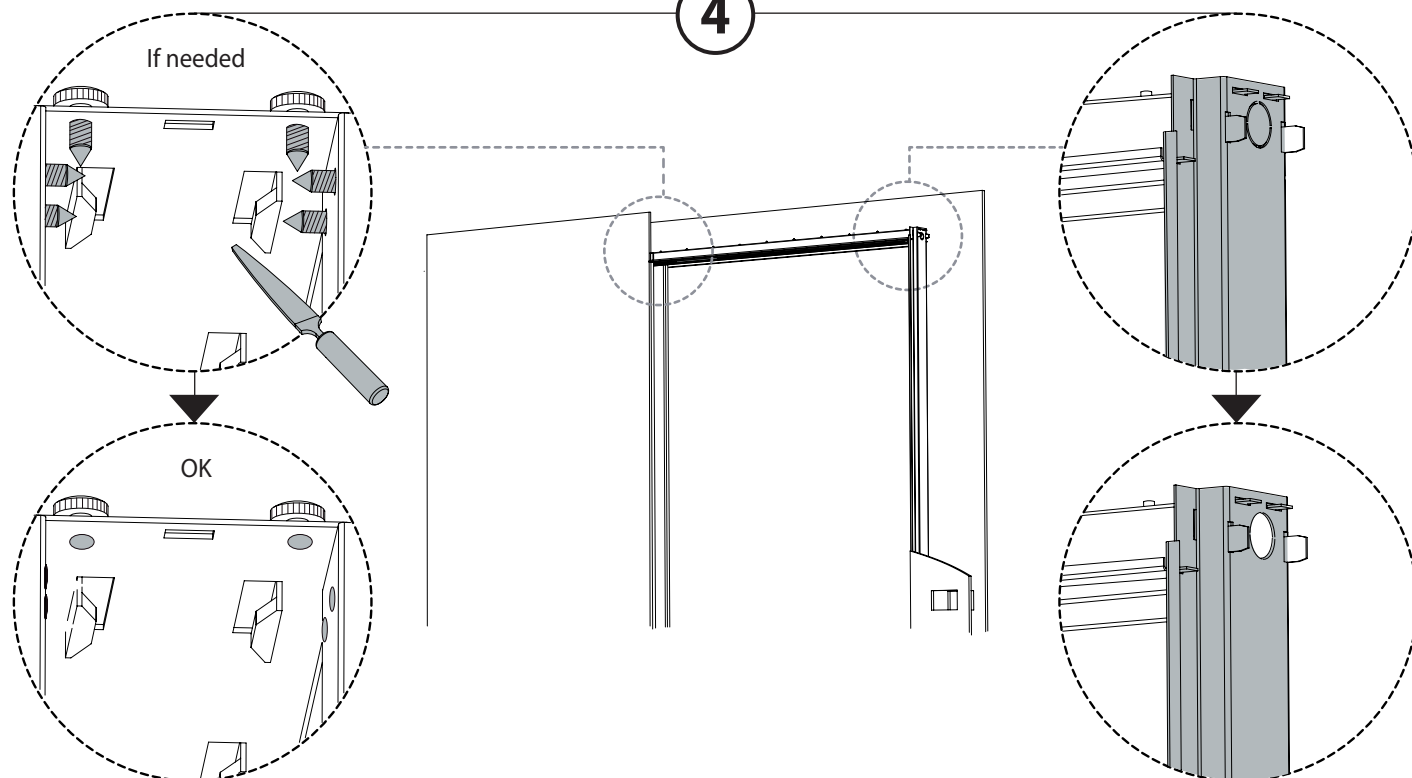
0.	GUIDE DISASSEMBLY .....	12
1.	E-MOTION AUTOMATIC GUIDE DESCRIPTION .....	14
2.	REAR STOP REGULATION .....	16
3.	COVER DISASSEMBLY .....	17
4.	GUIDE INSTALLATION IN THE POCKET SYSTEM.....	18
5.	ELECTRONIC COMPONENTS .....	20
6.	ACCESSORIES' TEST AND CONNECTION .....	24
7.	FUNCTIONING TEST .....	26
8.	COVER ASSEMBLY .....	27
9.a	WOODEN DOOR INSTALLATION.....	28
9.b	GLASS DOOR INSTALLATION .....	31
10.	COMMISSIONING ON .....	34

Here follow the visual instructions of each and every phase.

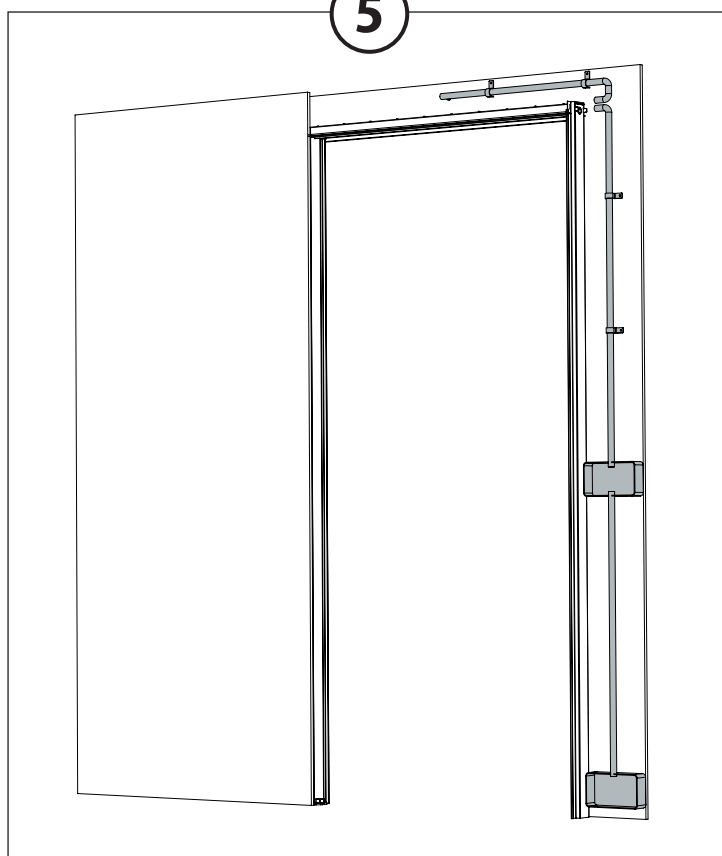
**0. GUIDE DISASSEMBLY****1****2****3**

## 0. GUIDE DISASSEMBLY

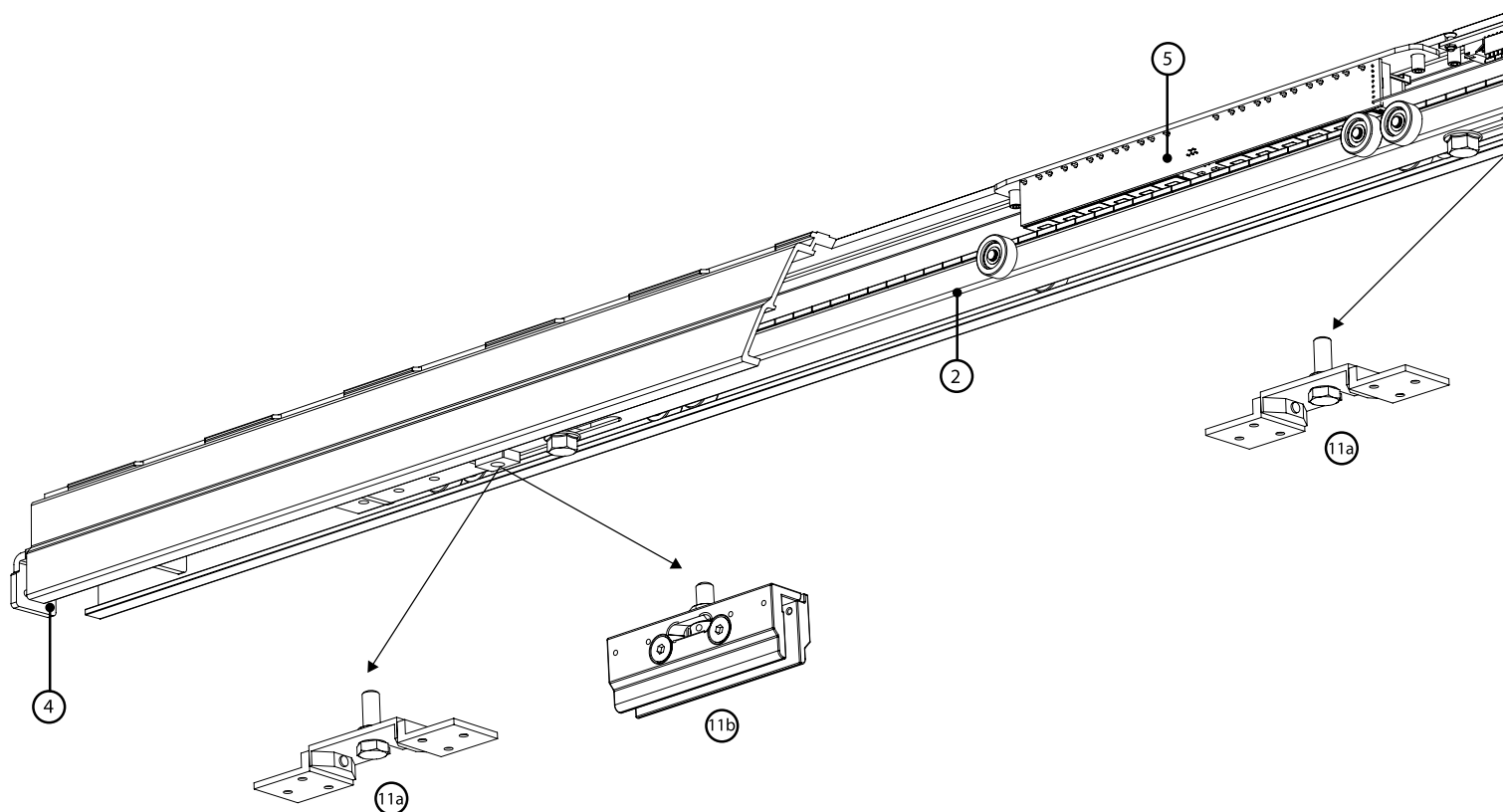
4



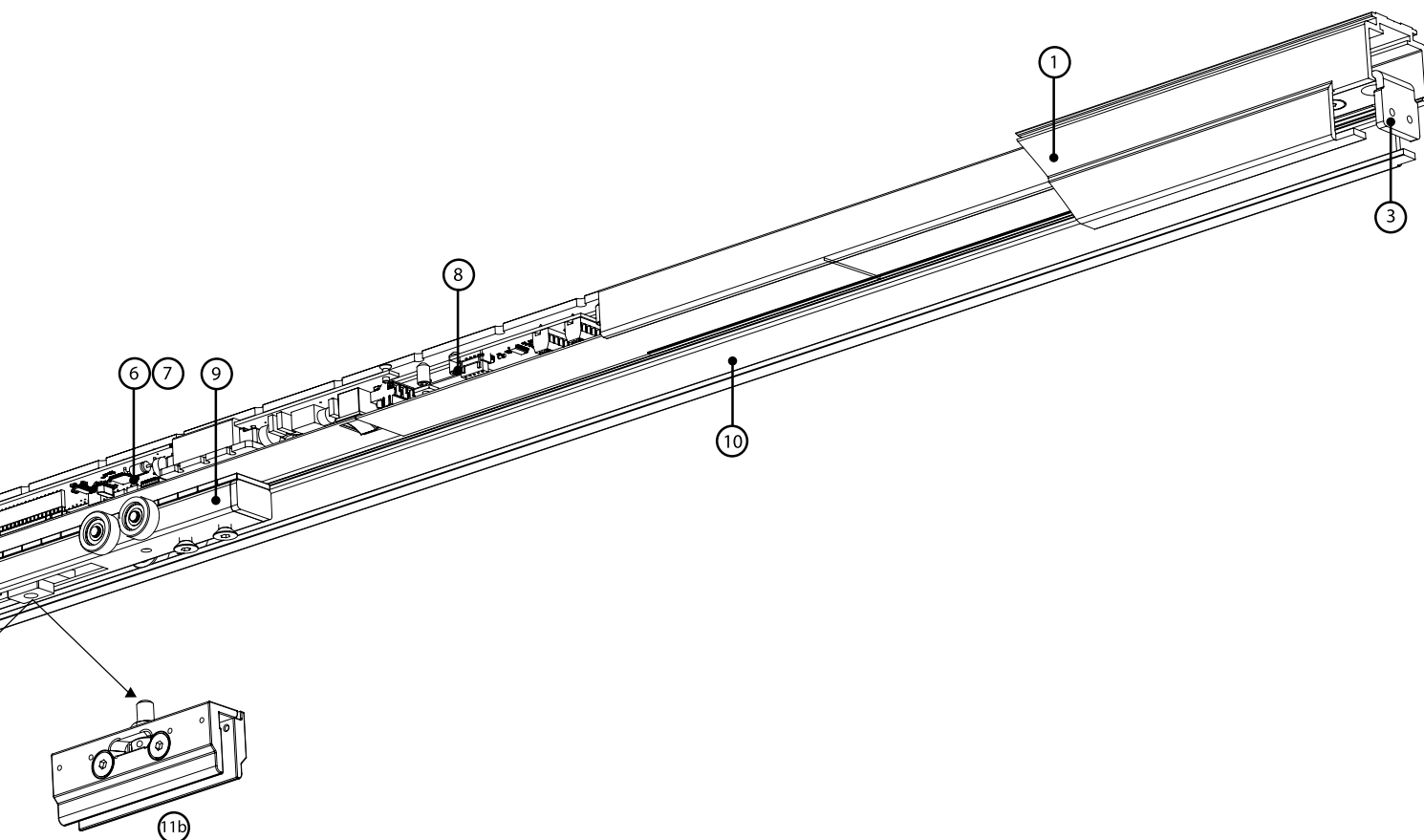
5



## 1. E-MOTION AUTOMATIC GUIDE DESCRIPTION

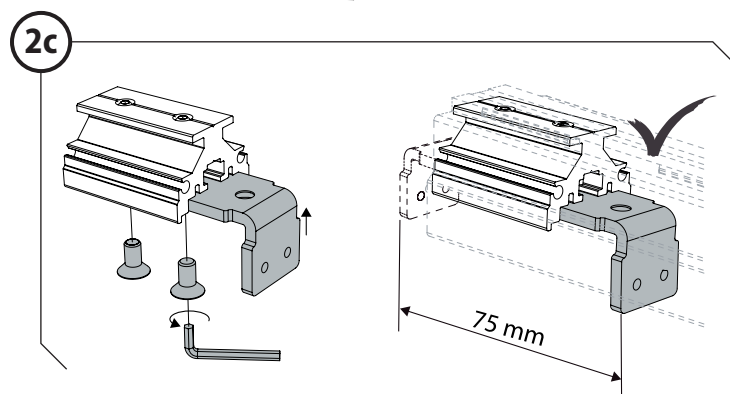
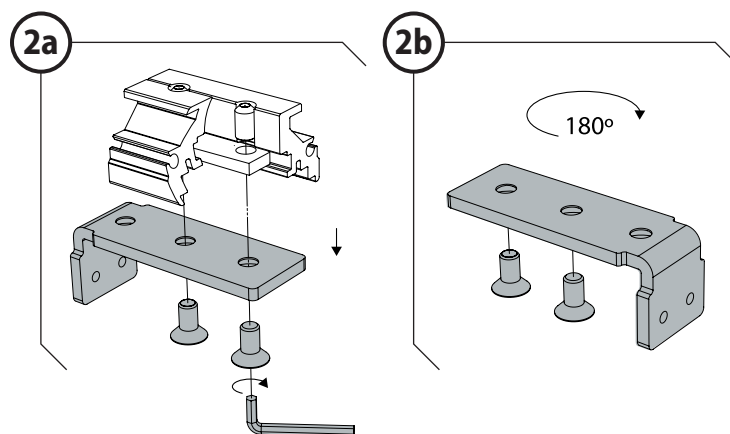
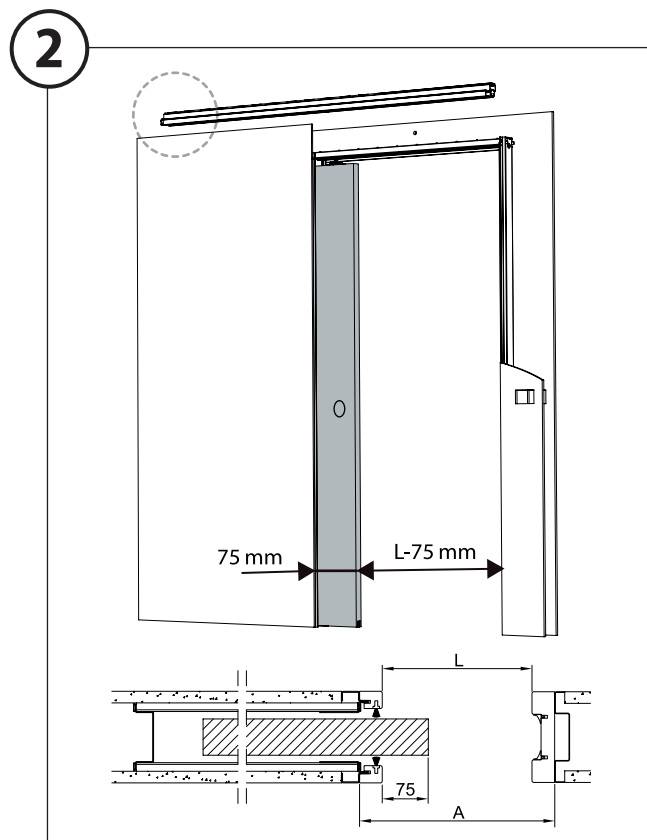
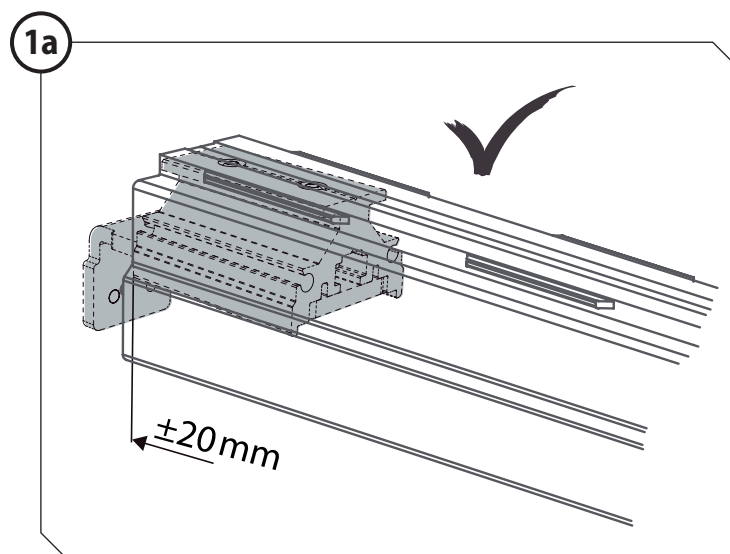
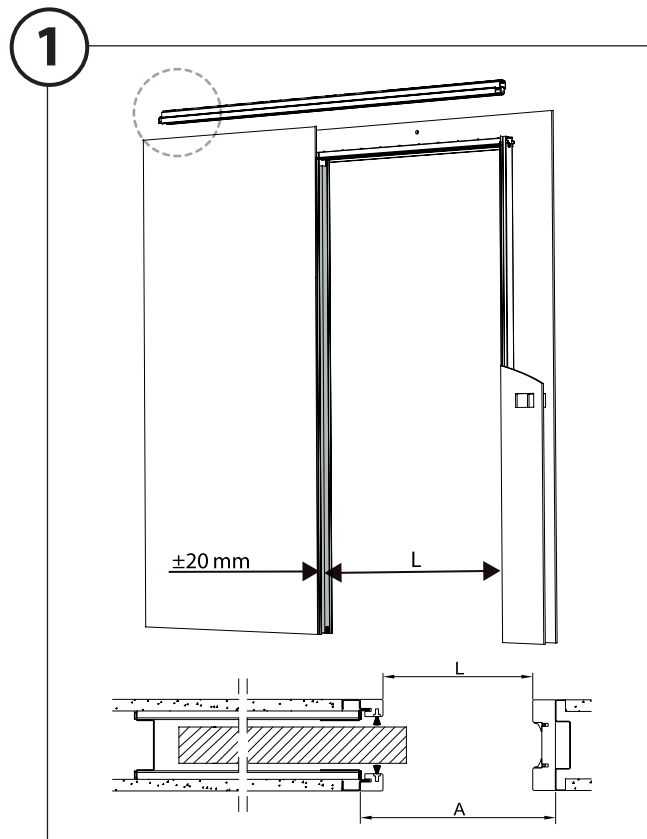


- |   |                    |     |                                   |
|---|--------------------|-----|-----------------------------------|
| 1 | Principal profile  | 7   | Power electronic                  |
| 2 | Hung-door track    | 8   | Accessories electronic            |
| 3 | Stop – closing     | 9   | Permanent magnets' array          |
| 4 | Stop – opening     | 10  | Lower cover                       |
| 5 | Linear motor...    | 11a | Wooden door adjustable suspension |
| 6 | Control electronic | 11b | Glass door adjustable suspension  |

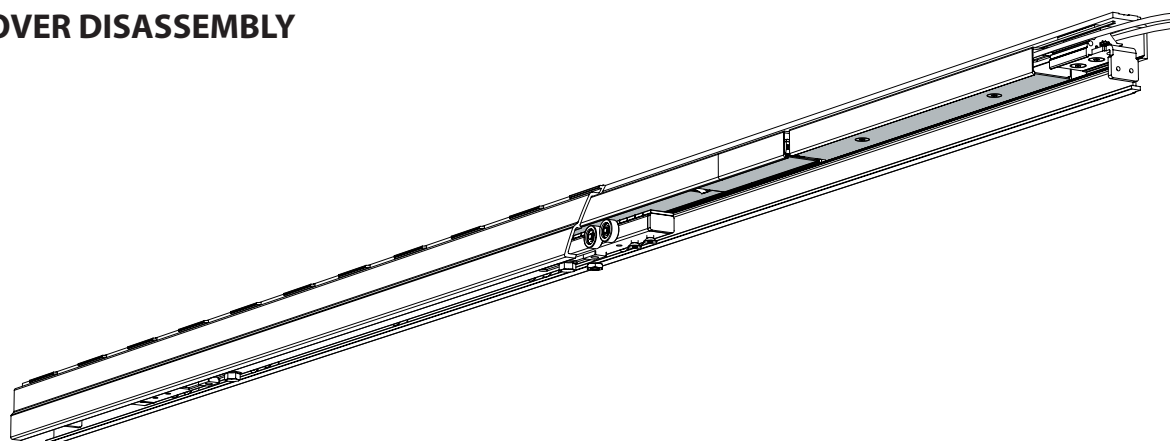


ELECTRIC CHARACTERISTIC – see page 7

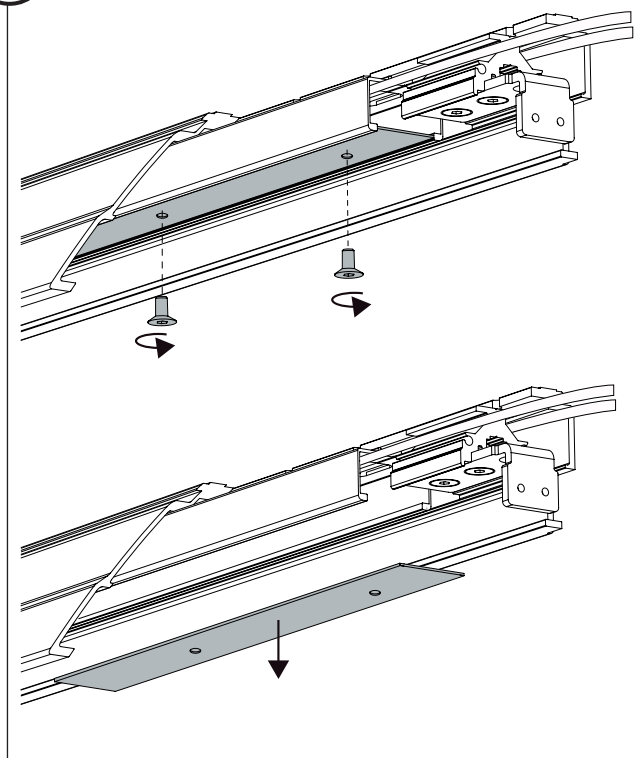
## 2. REAR STOP REGULATION



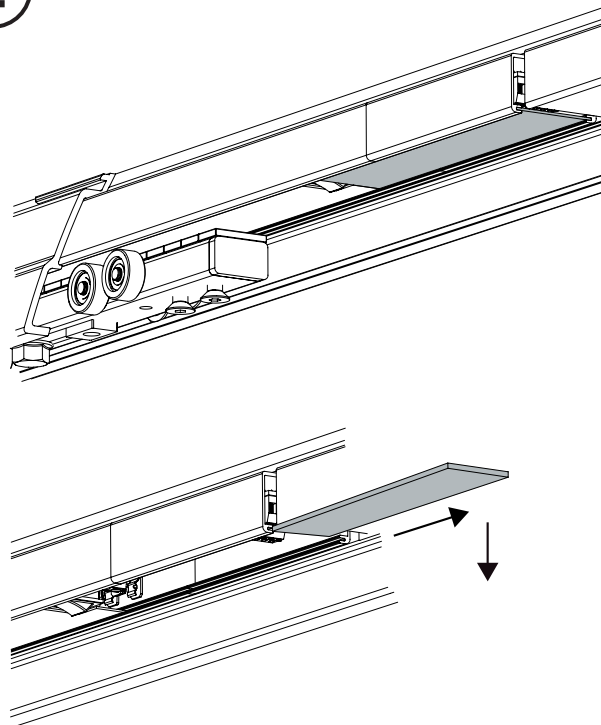
### 3. COVER DISASSEMBLY



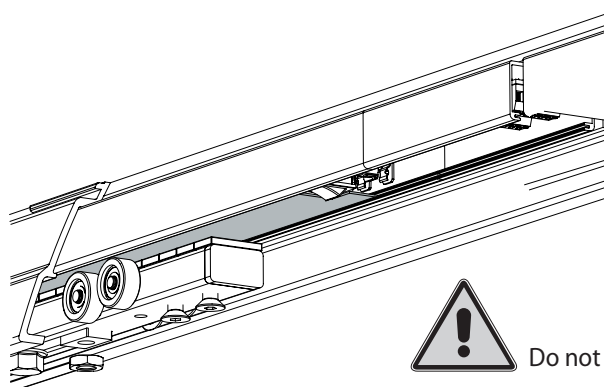
1



2

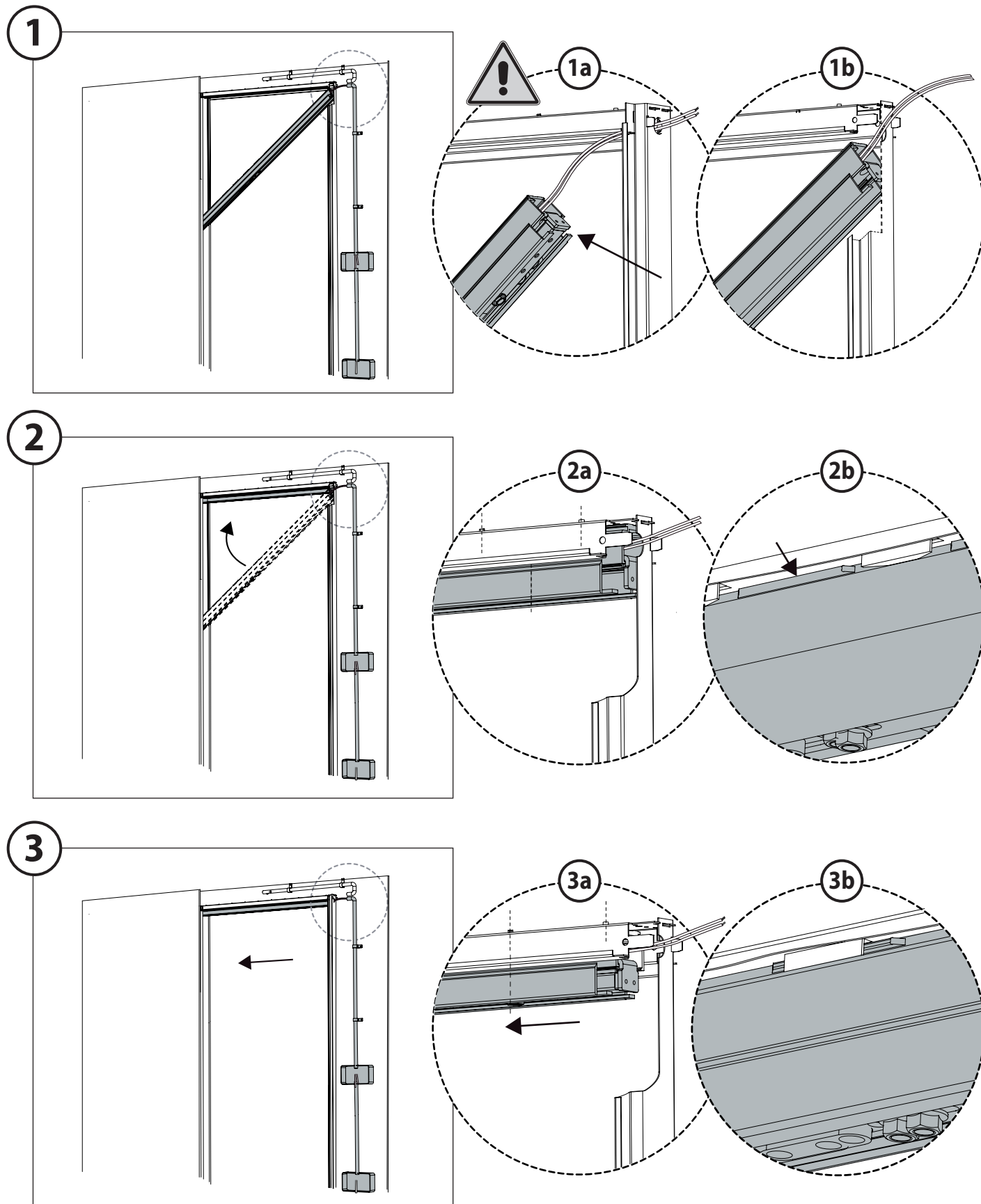


3



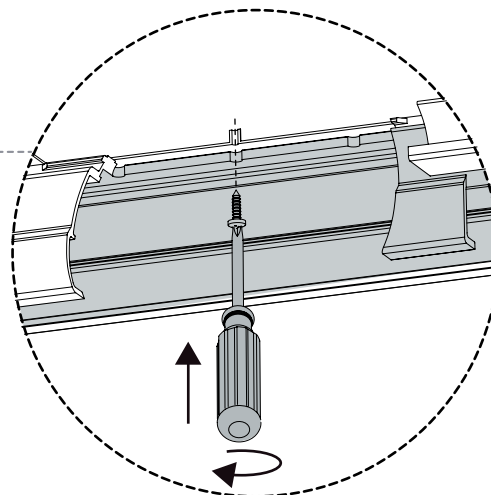
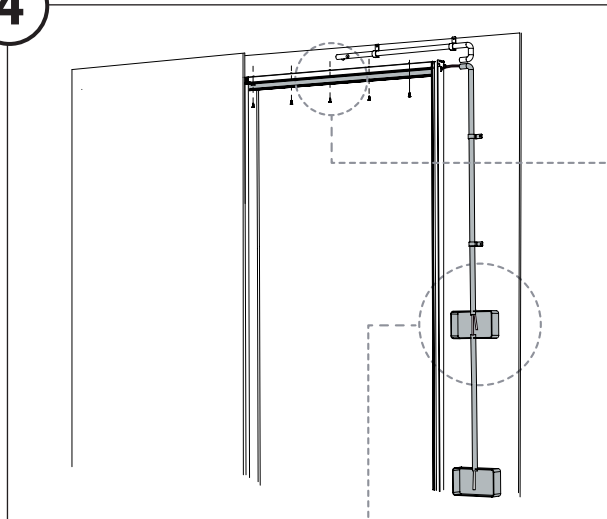
Do not disassembly

#### 4. GUIDE INSTALLATION IN THE POCKET SYSTEM

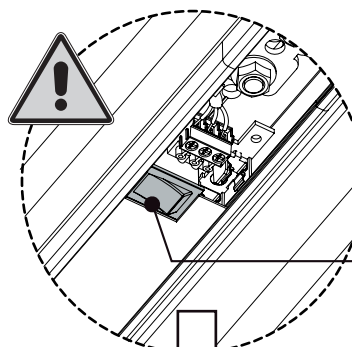
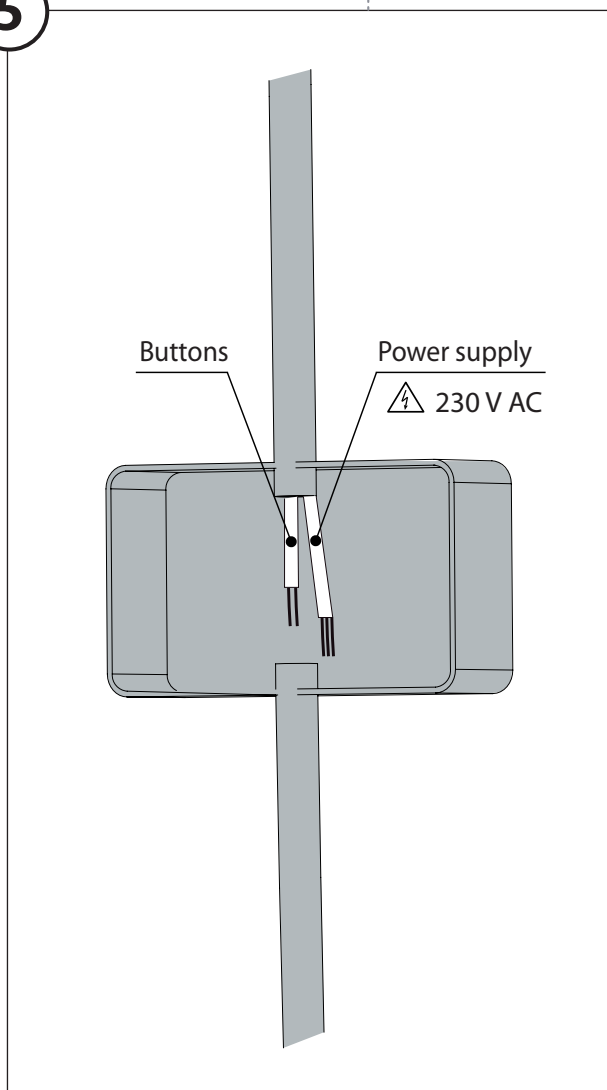


#### 4. GUIDE INSTALLATION IN THE POCKET SYSTEM

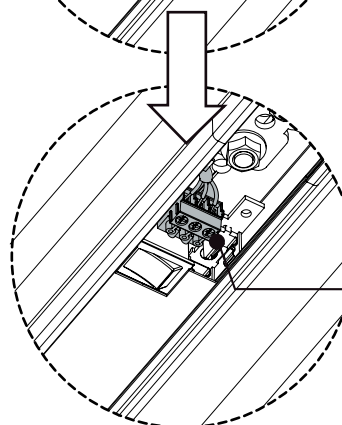
4



5

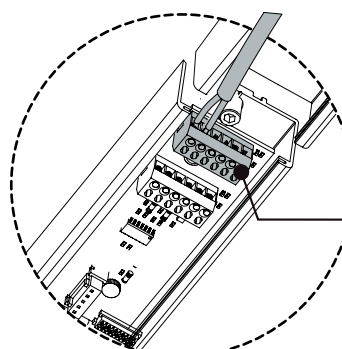


⚡ 230 V AC  
OFF



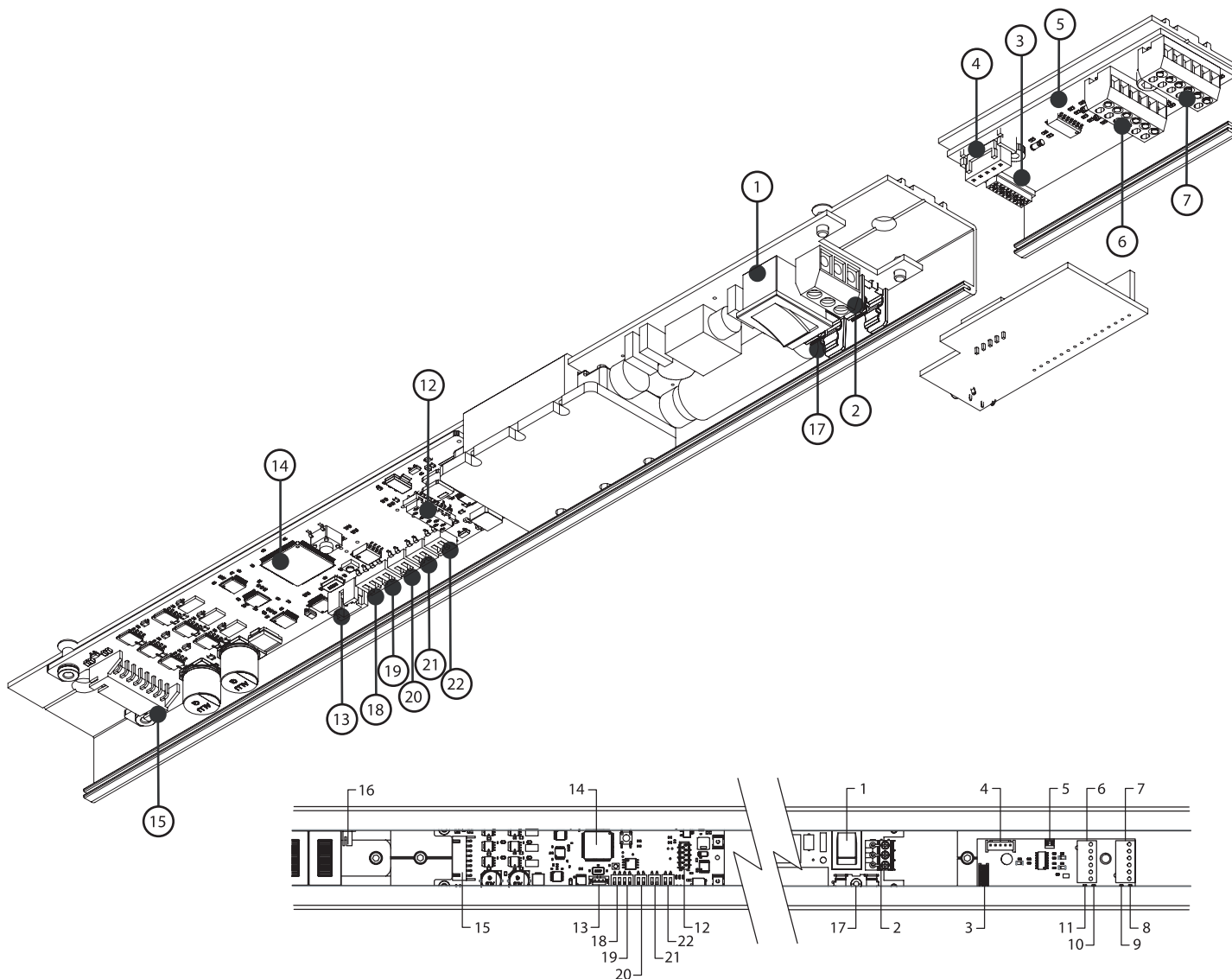
**Power supply**

⏏	Green-Yellow	EARTH
N	Blue	NEUTER
L	Brown	PHASE



**Buttons**

A2	Red
A1	Black
C2	
C1	
OV	
V+	



- 1 ON/OFF Button
- 2 Power supply input 220V-50 Hz
- 3 Accessories circuit connection
- 4 RF receiver connection
- 5 Domotics connection (reserved)
- 6 External radar and lock connection
- 7 Internal radar and buttons connection
- 8 Green led (internal radar signal active)

- 9 Orange led (button signal active)
- 10 Green led (external radar signal active)
- 11 Red led (lock signal active)
- 12 Accessories circuit connection
- 13 PC connection (reserved)
- 14 Microprocessor
- 15 Motor/ receiver connection
- 16 Motor/ receiver connection

- 17 Protection fuse 2 A
- 18 Operation
- 19 Regulation of opening speed
- 20 Regulation of closing sensitivity force
- 21 Regulation of door opened time
- 22 Dip switches (door Weight)

## 5. ELECTRONIC COMPONENTS



OPERATING MANUAL, USE AND MAINTENANCE  
AUTOMATIC GUIDE E-MOTION

GB

EC\_MAN\_IST\_020  
Rev. 2

## ELECTRIC CHARACTERISTICS

### Power supply

Voltage	<b>230 V AC</b>
Power	<b>150 W</b>
Intensity	<b>0,75 A</b>
Frequency	<b>50/60 Hz</b>

### Normative



2006/42/CE  
2004/108/CE  
2006/95/CE  
EN 60335

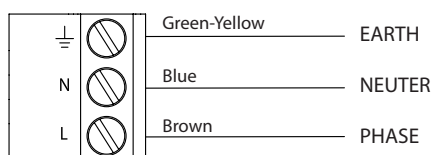
### Linear Motor

Type:	<b>"PMSM" Permanent magnet synchronous motor Iron core. 3 Phases - 4 Poles - 24 V</b>			
Magnets:	<b>Neodymium 35 H</b>	<b>Pitch Pole 25 mm</b>		
Consumption:	<b>Peak</b>	<b>150 W</b>	<b>Force:</b>	<b>80 N</b>
	<b>Medium</b>	<b>80 W</b>	<b>IP:</b>	<b>IP 22</b>
	<b>Stand-By</b>	<b>15 W</b>	<b>Class:</b>	<b>I</b>

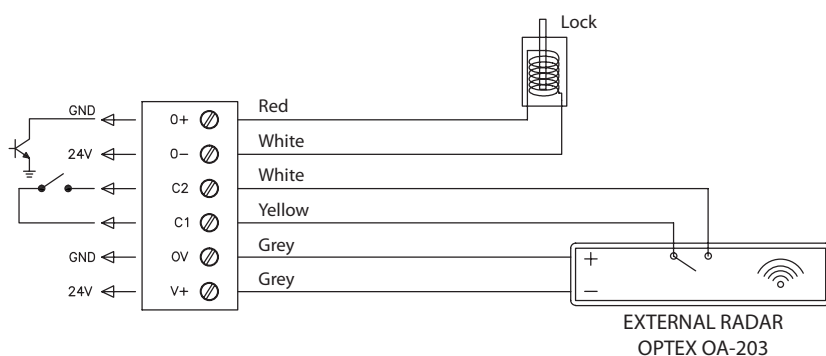
### Accessories

Power:	<b>25 W</b>	Power supply	<b>24 V DC</b>
		Consumption	<b>1 A</b>

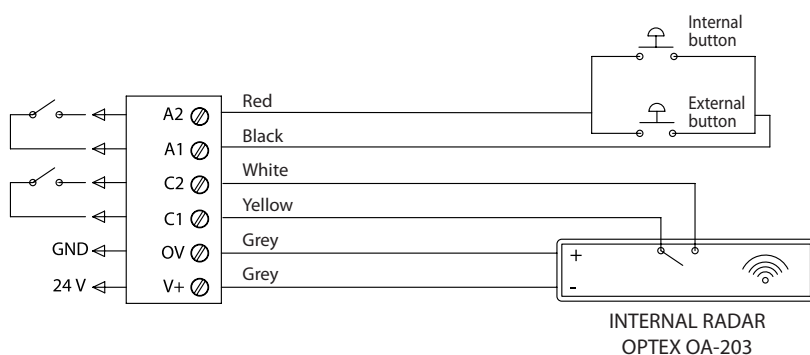
## ② → POWER SUPPLY INPUT

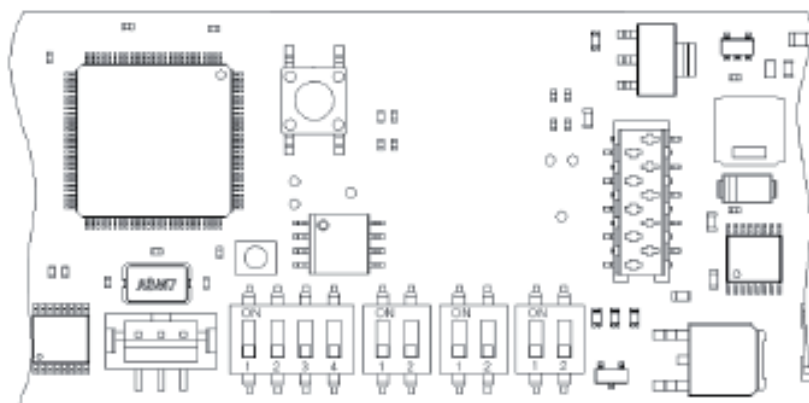


## ⑥ → EXTERNAL RADAR AND LOCK CONNECTION























## ⑦ → INTERNAL RADAR AND BUTTON CONNECTION





1a | 1b | 2 | 3 | 4

Operating modes      Regulation of sensitivity force  
Obstacles detection      Regulation of door  
opened time      Door Weight

Operating modes  1a	Switch 1		Switch 2	Operating modes	To confirm the change of the operating mode
	OFF		OFF	Normal	Automatic
	ON		ON	Cyclic	Automatic
	OFF		OFF	without Remote Control	Automatic
	OFF		ON	with Remote Control	Automatic
Regulation of opening speed  1b	Switch 1		Switch 2	Regulation of opening speed	To confirm the change of sensitivity force
	OFF		OFF	Medium speed	ON/OFF Button
	ON		OFF	High speed	ON/OFF Button
	OFF		ON	Low speed or "Low Energy"	ON/OFF Button
	ON		ON		ON/OFF Button
Rugulation of sensitivity force Obstacles detection  2	Switch 1		Switch 2	Rugulation of sensitivity force Obstacles detection	To confirm the change of sensitivity force
	OFF		OFF	high	ON/OFF Button
	ON		OFF	Medium high	ON/OFF Button
	OFF		ON	Medium low	ON/OFF Button
	ON		ON	Low	ON/OFF Button
Regulation of door opened time  3	Switch 1		Switch 2	Regulation of door opened time	To confirm the change of sensitivity force
	OFF		OFF	2,5 Seconds	ON/OFF Button
	ON		OFF	5 Seconds	ON/OFF Button
	OFF		ON	10 Seconds	ON/OFF Button
	ON		ON	20 Seconds	ON/OFF Button
Door weight insertion  4	Switch 1		Switch 2	Door weight insertion	To confirm the weight
	OFF		OFF	0-20 kg	ON/OFF Button
	ON		OFF	20-40 kg	ON/OFF Button
	OFF		ON	40-60 kg	ON/OFF Button
	ON		ON	60-80 kg	ON/OFF Button



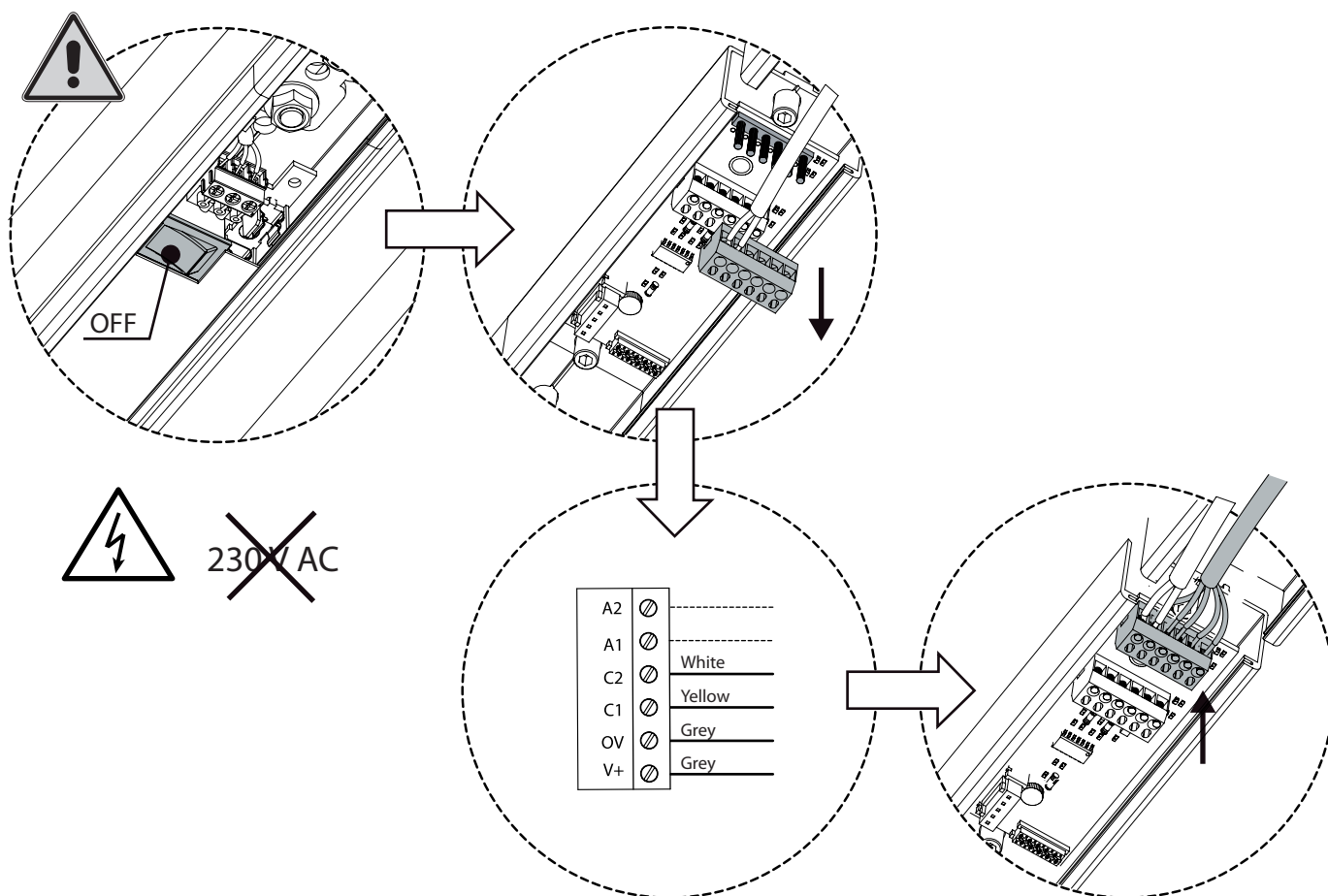
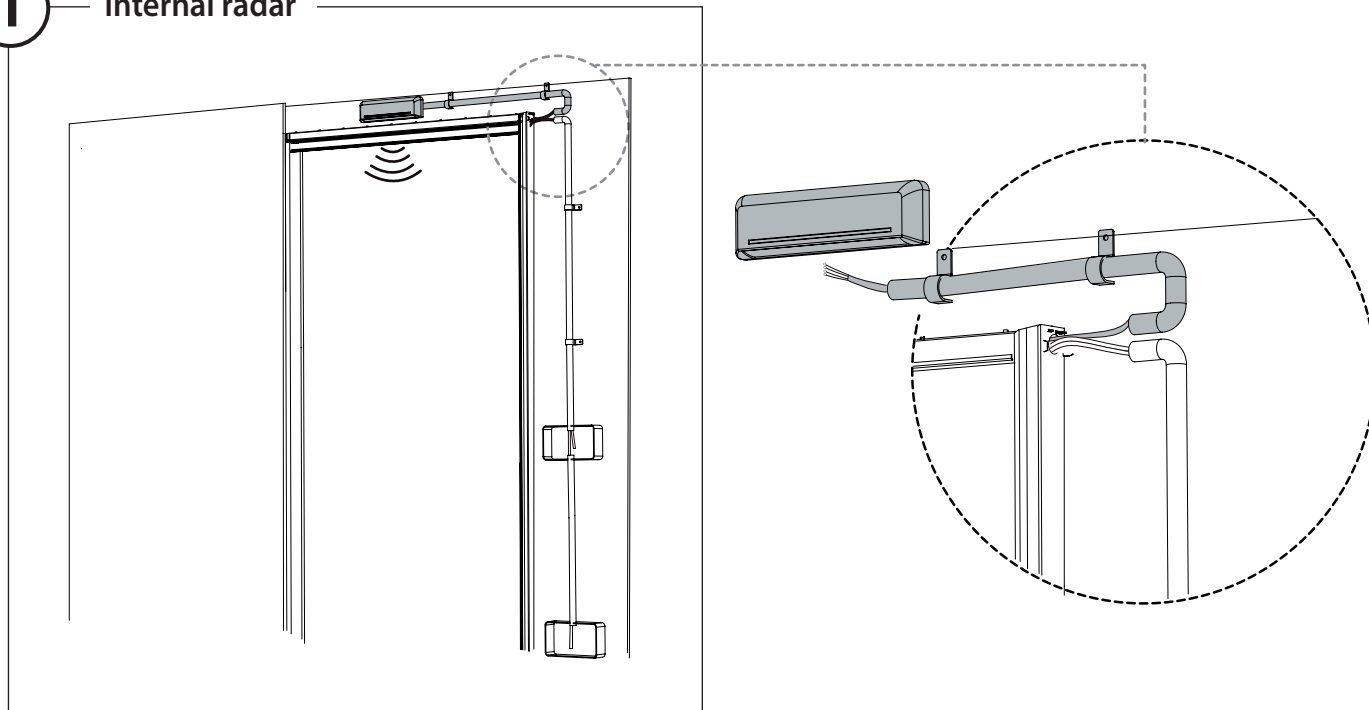
OPERATING MANUAL, USE AND MAINTENANCE  
AUTOMATIC GUIDE E-MOTION



EC\_MAN\_IST\_020  
Rev. 2

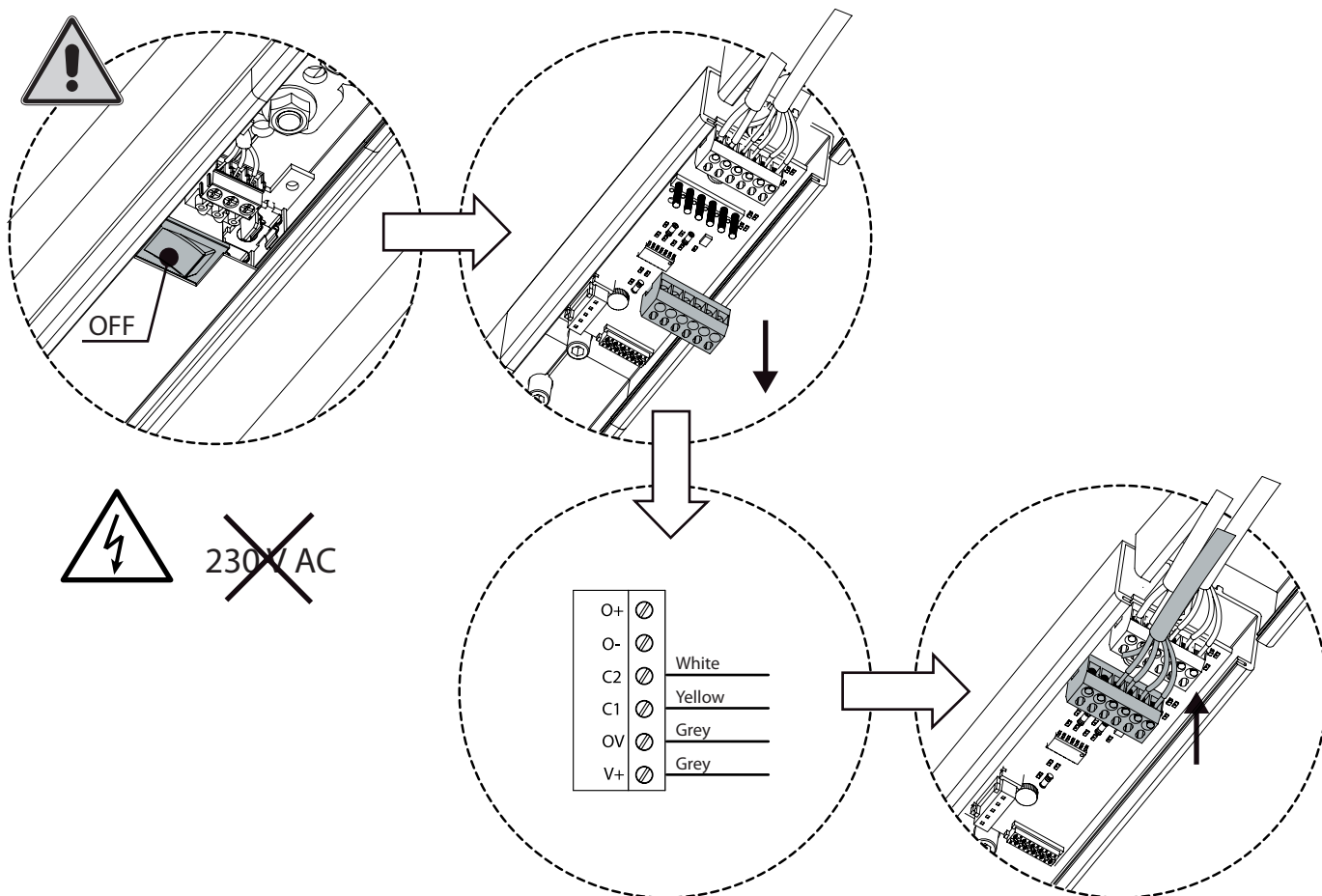
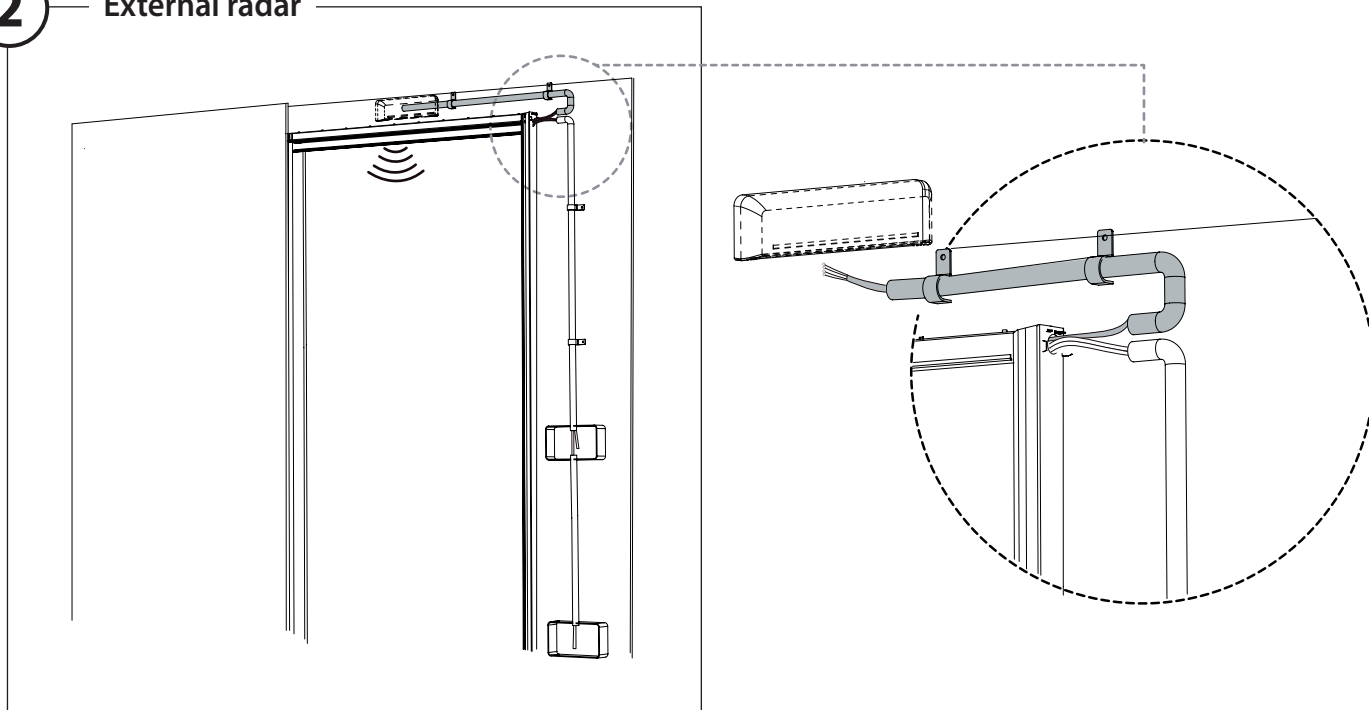
## 6. ACCESSORIES' TEST AND CONNECTION

### 1 Internal radar



## 6. ACCESSORIES' TEST AND CONNECTION

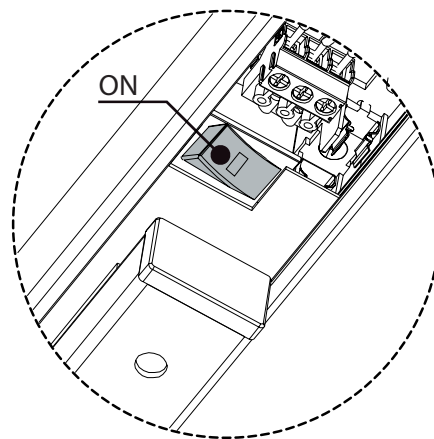
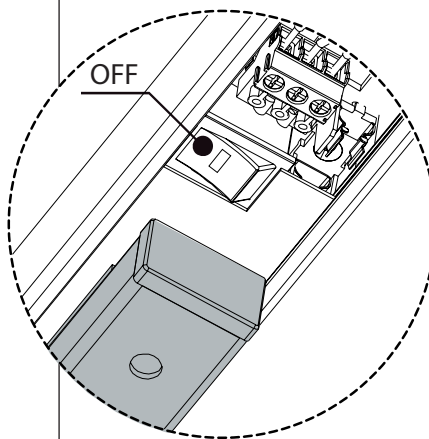
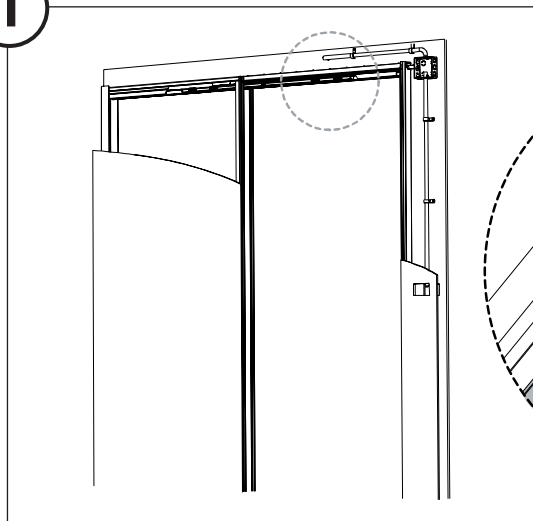
### 2 External radar



## 7. FUNCTIONING TEST

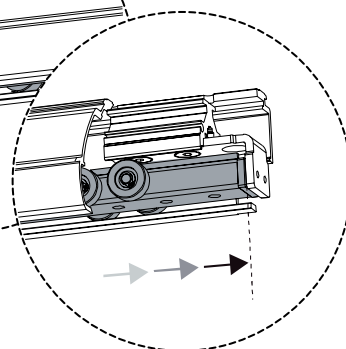
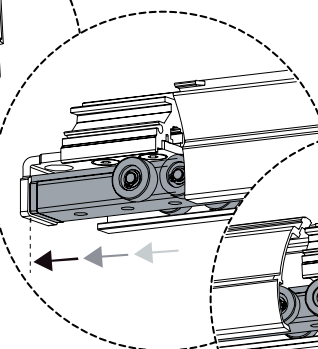
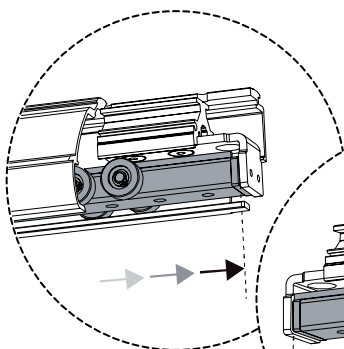
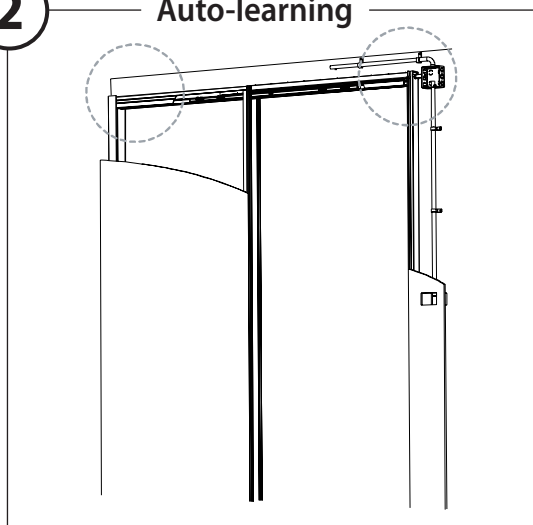
**ADVICE:** It is recommended to test the automatic guide without the activation elements (button, radar). In case of successful operation, connect the accessories and make the test again. This method allows to detect a potential malfunction.

1

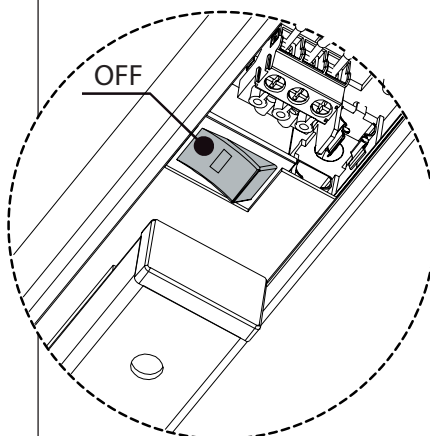
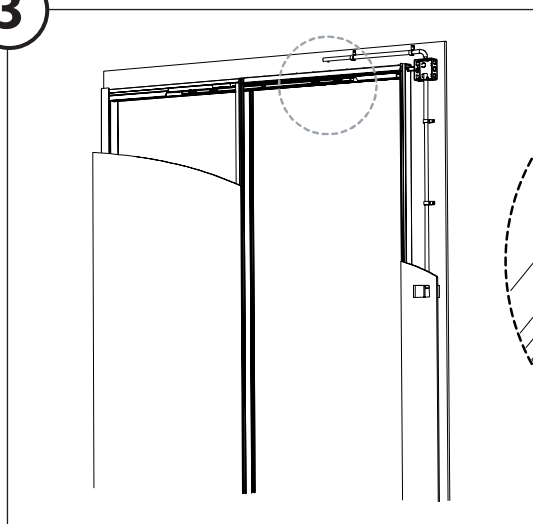


2

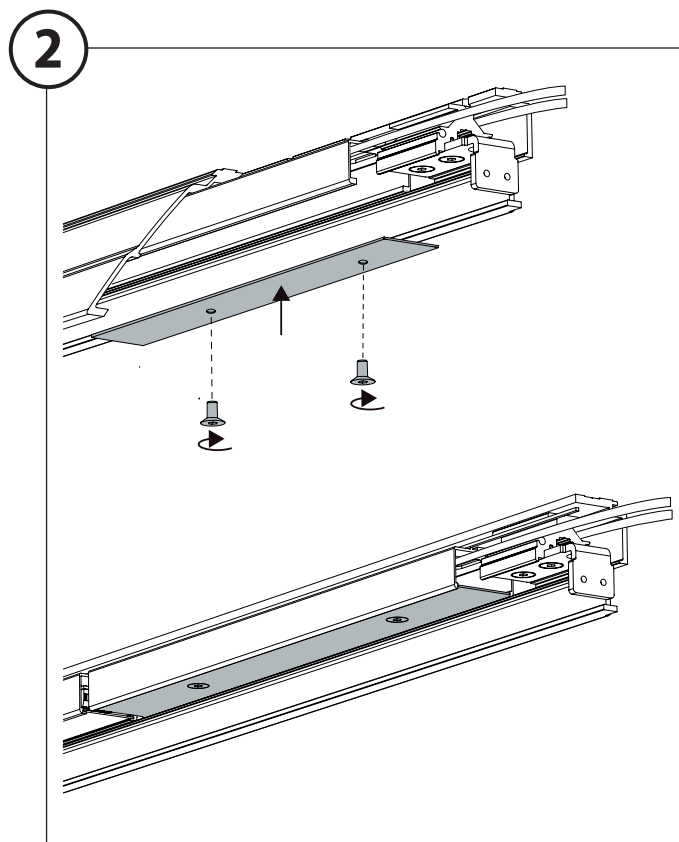
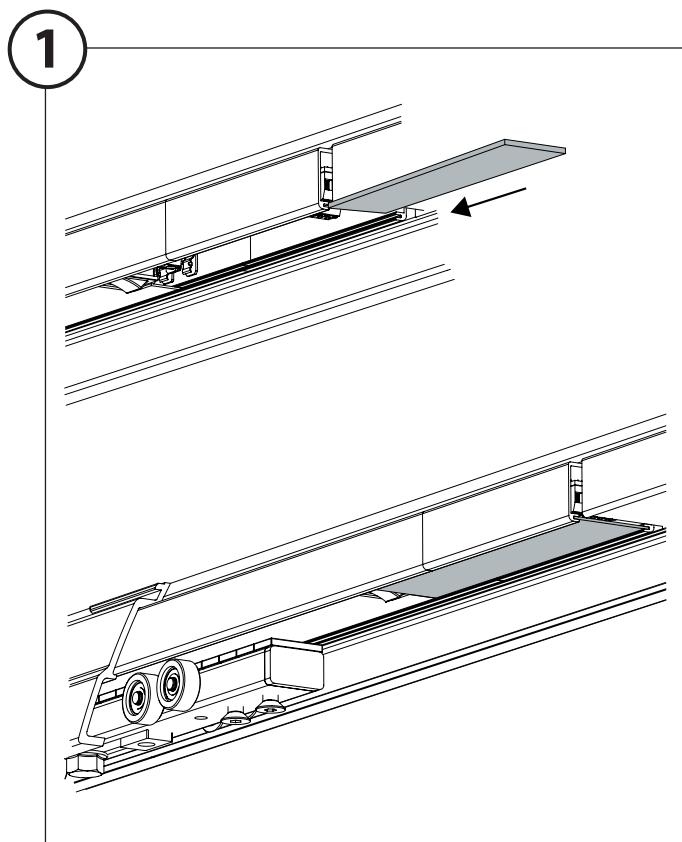
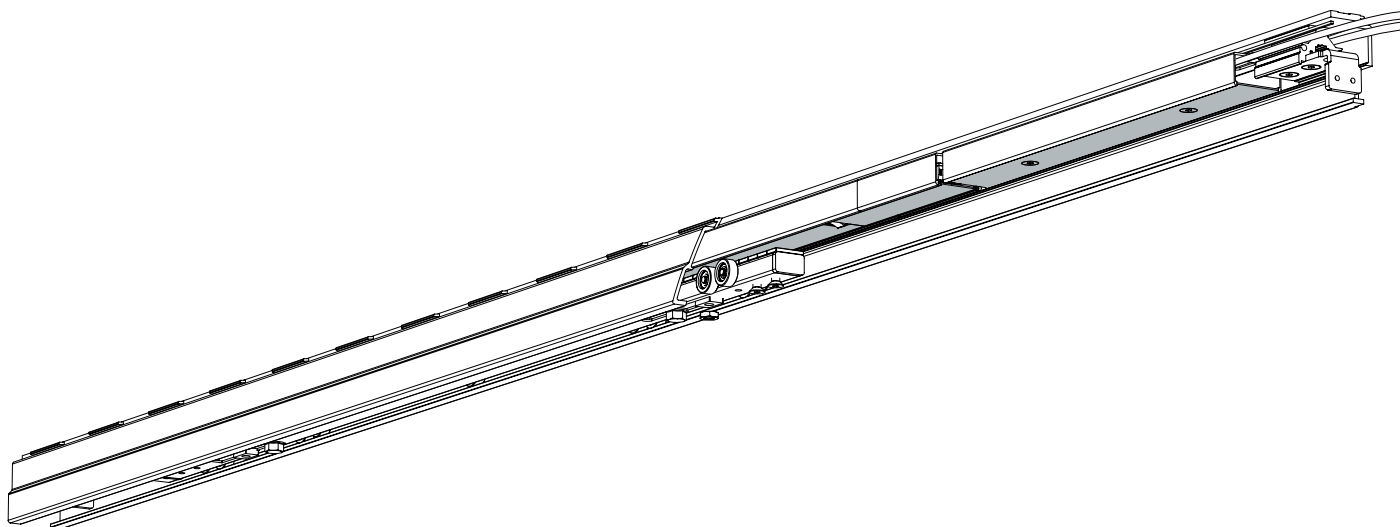
Auto-learning



3

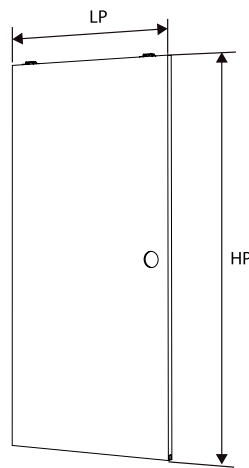
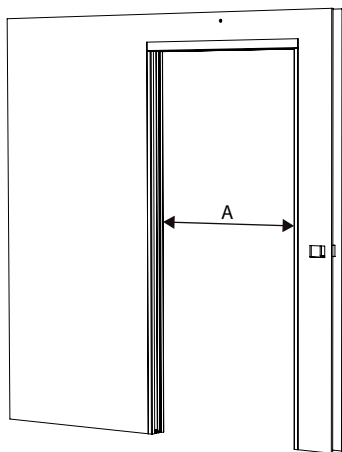


## 8. COVER ASSEMBLY

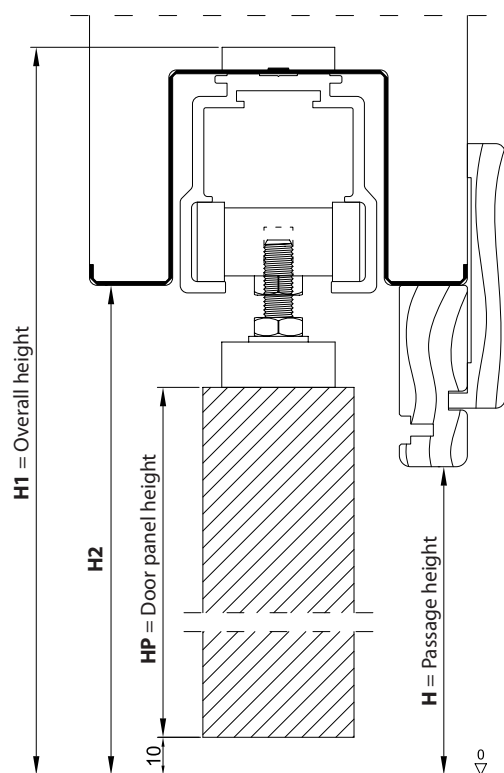


## 9a. WOODEN DOOR INSTALLATION

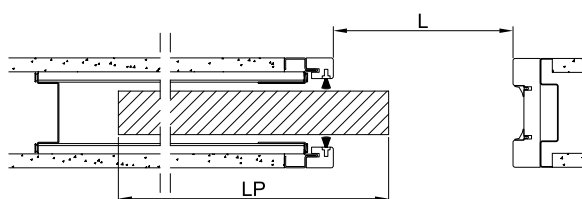
1



COUNTERFRAME PREPARED FOR E-MOTION

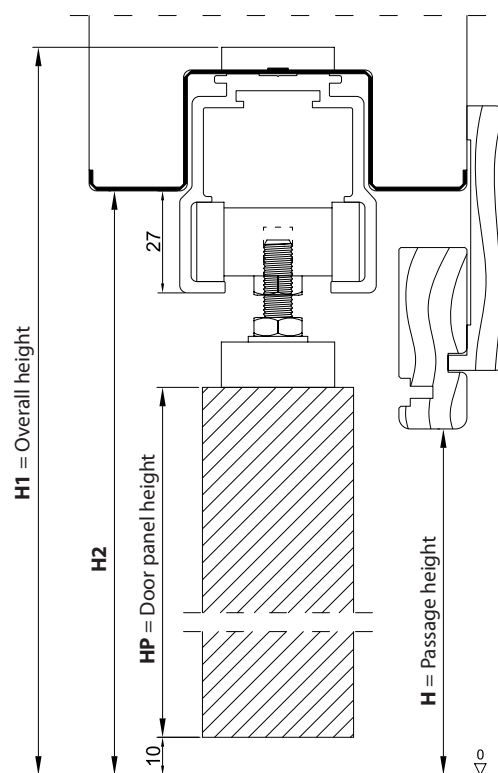


$$HP \text{ Door panel height} = H2 - 37 \text{ mm}$$

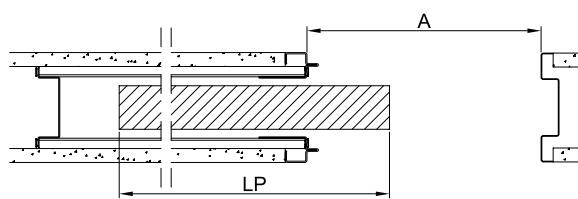


$$LP \text{ Door panel width} = L + 35 \text{ mm}$$

COUNTERFRAME NOT PREPARED FOR E-MOTION

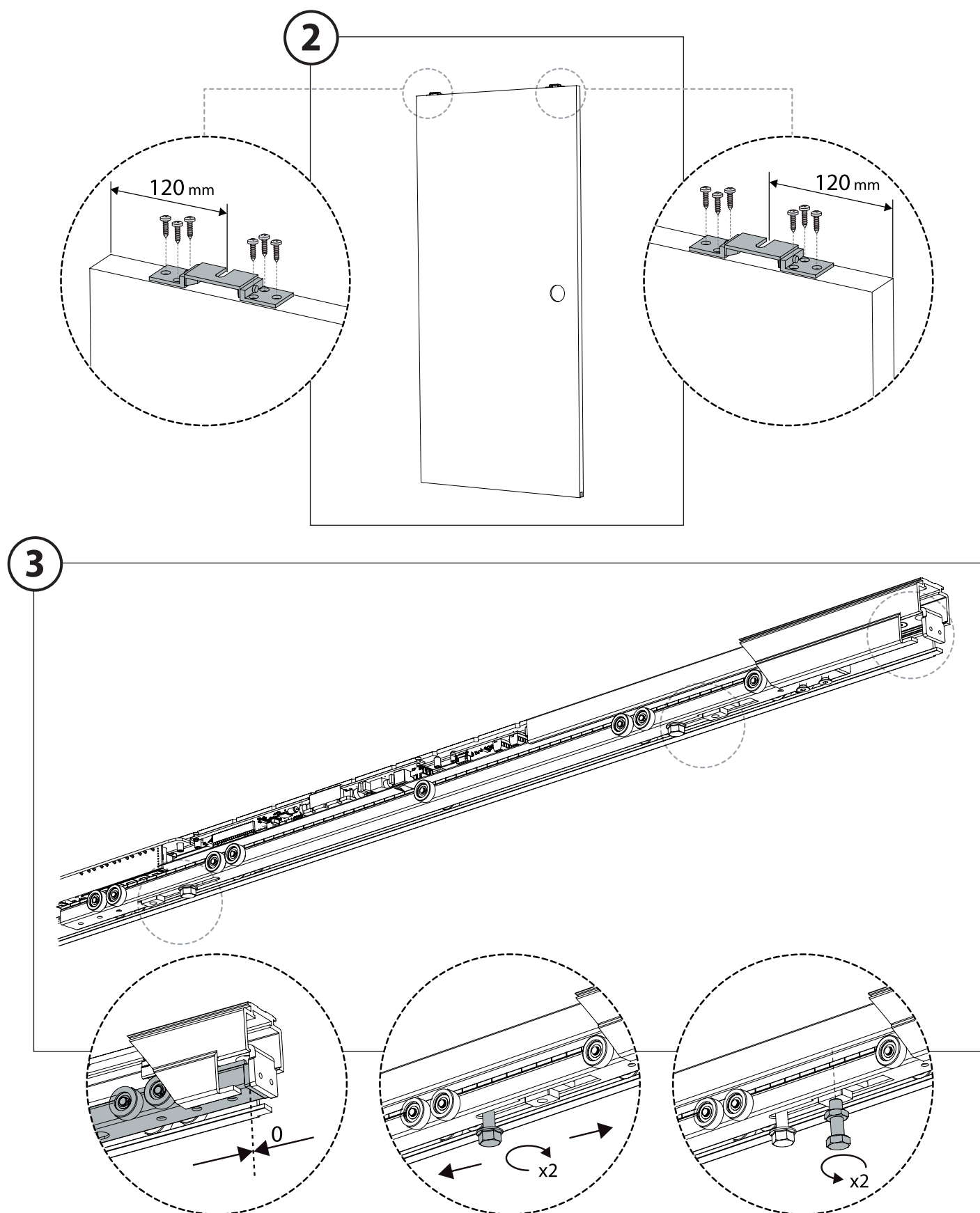


$$HP \text{ Door panel height} = H2 - 62 \text{ mm}$$

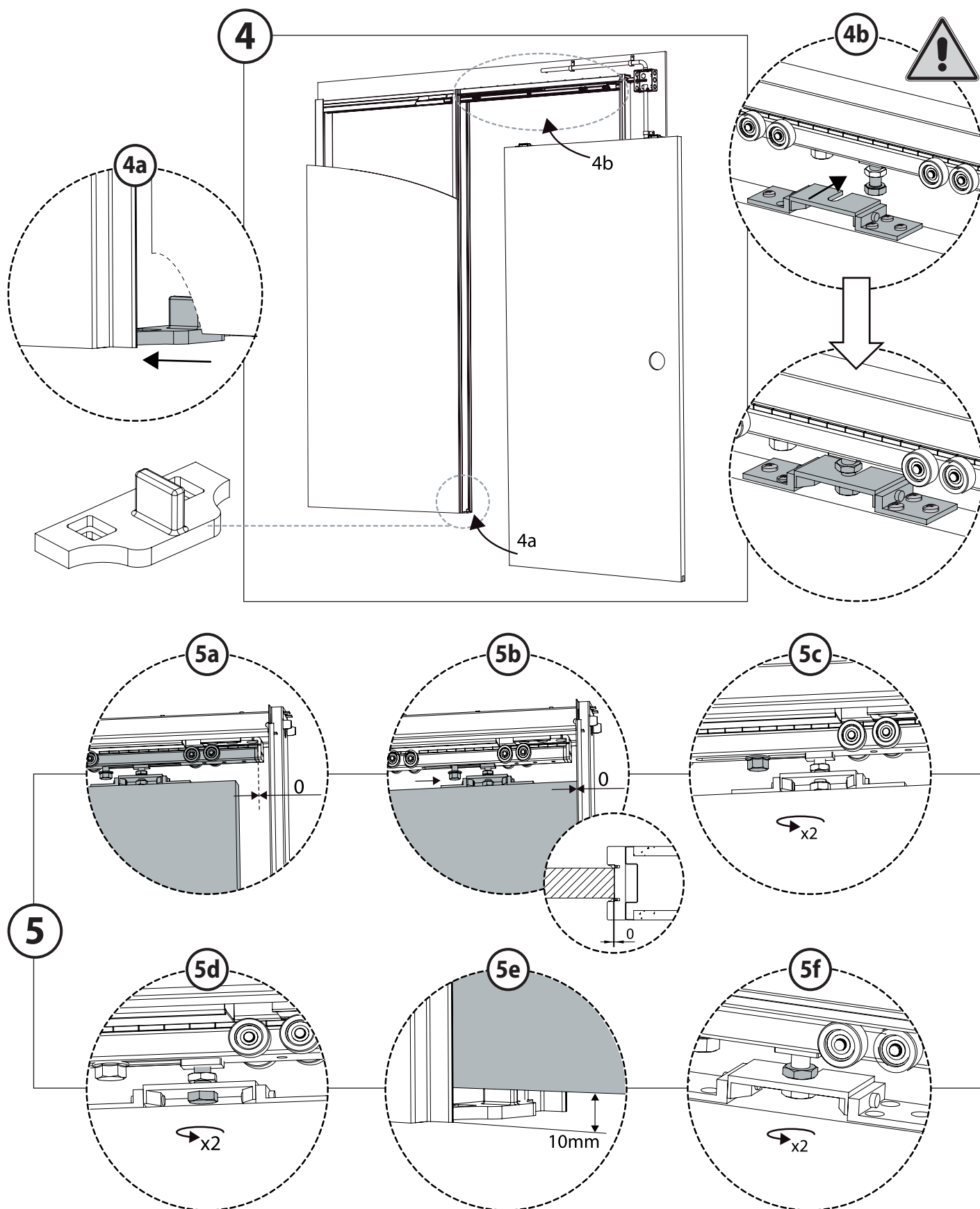


$$LP \text{ Door panel width} = A - 15 \text{ mm}$$

## 9a. WOODEN DOOR INSTALLATION

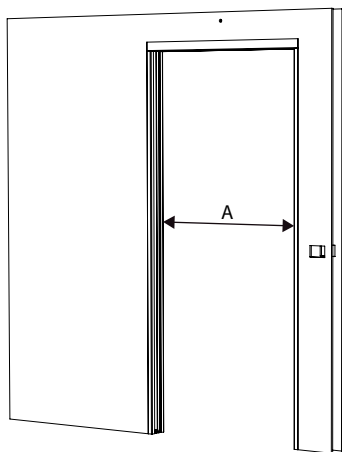


## 9a. WOODEN DOOR INSTALLATION

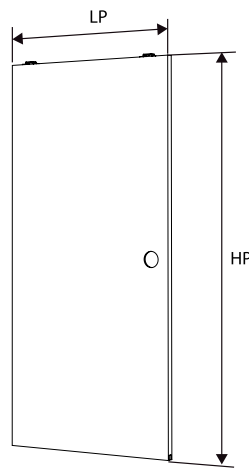


## 9b. GLASS DOOR INSTALLATION

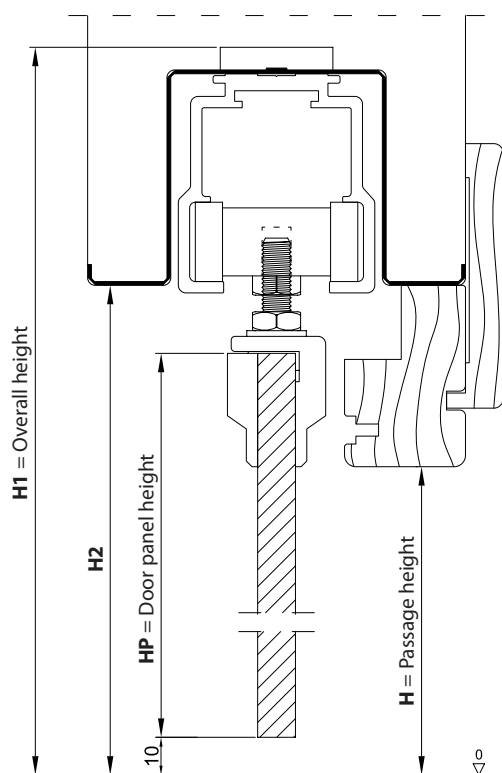
1



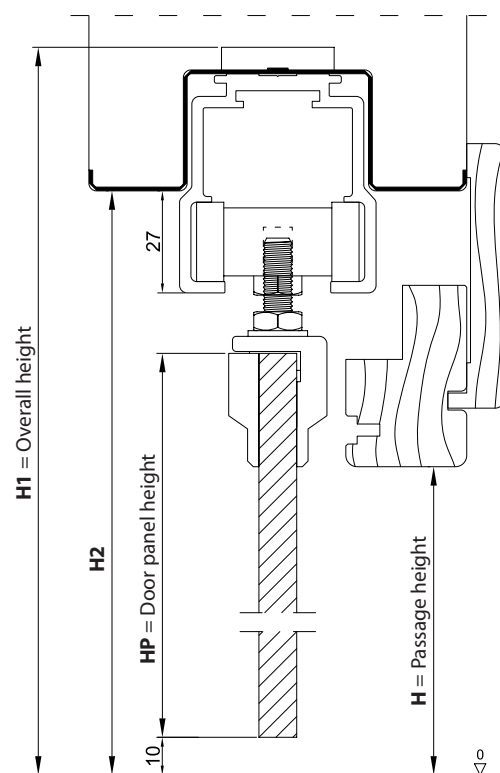
COUNTERFRAME PREPARED FOR E-MOTION



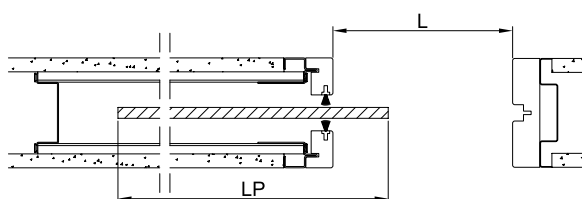
COUNTERFRAME NOT PREPARED FOR E-MOTION



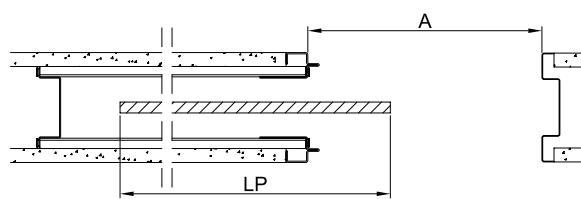
$$\text{HP Door panel height} = H2 - 28 \text{ mm}$$



$$\text{HP Door panel height} = H2 - 53 \text{ mm}$$

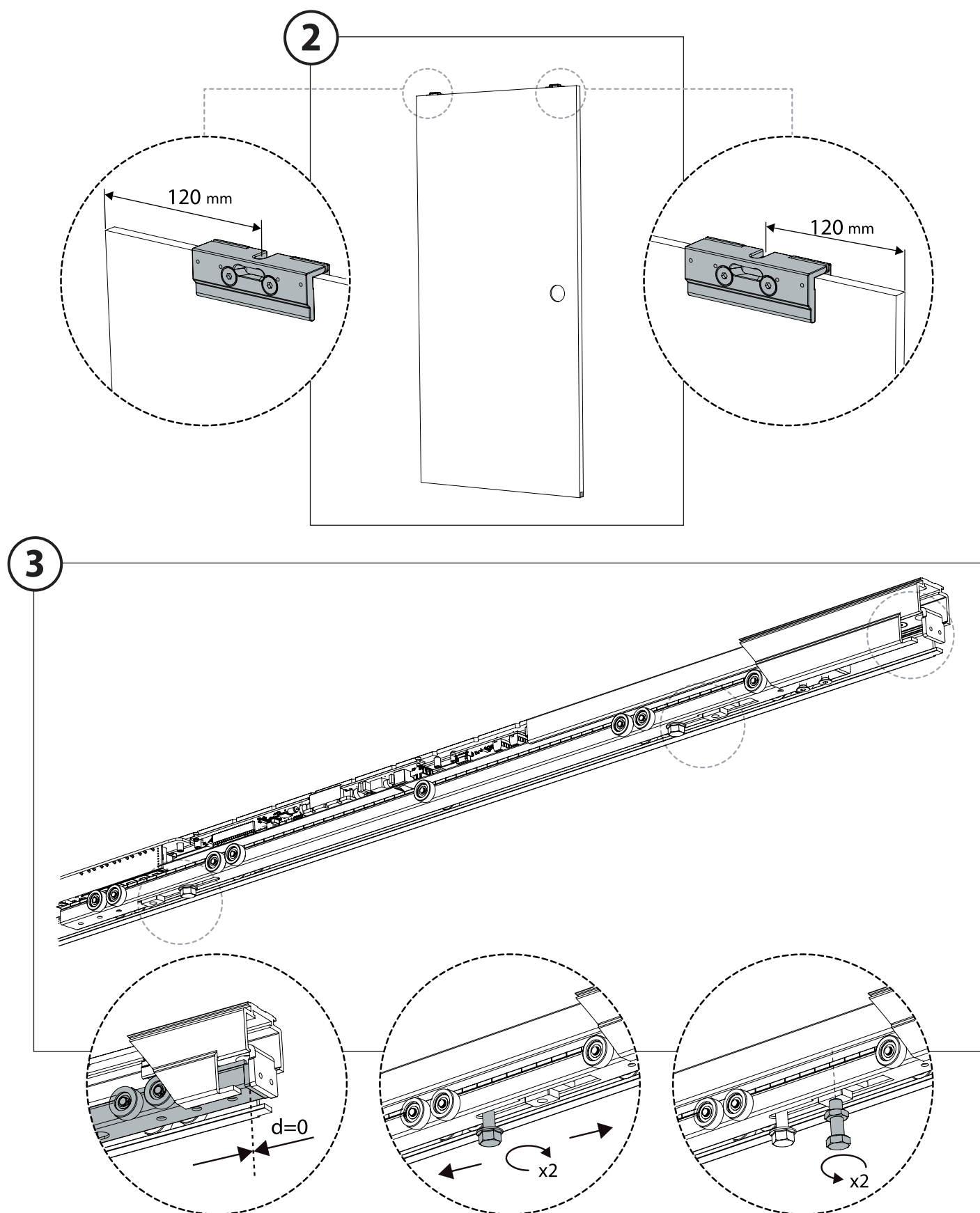


$$\text{LP Door panel width} = L + 35 \text{ mm}$$

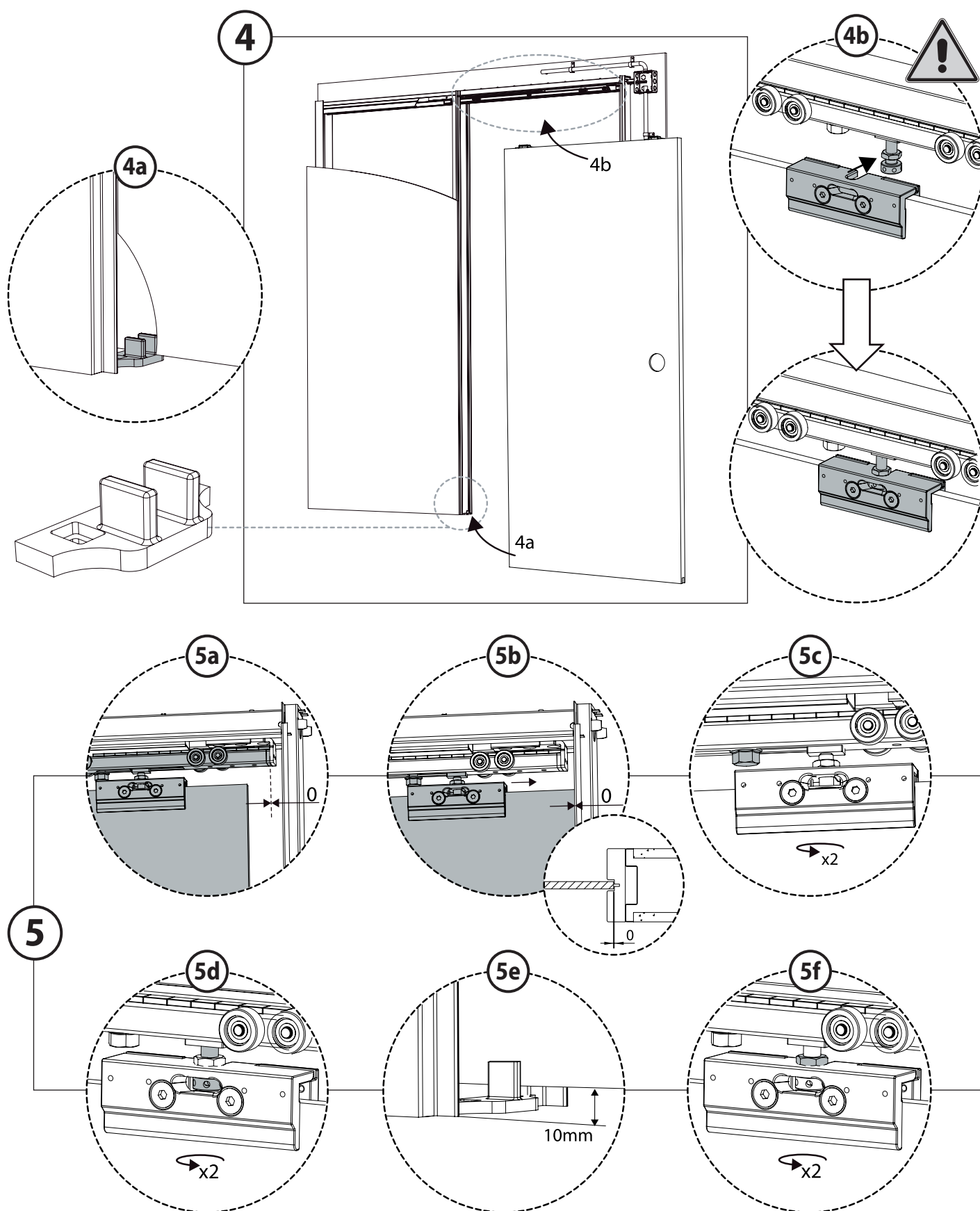


$$\text{LP Door panel width} = A - 15 \text{ mm}$$

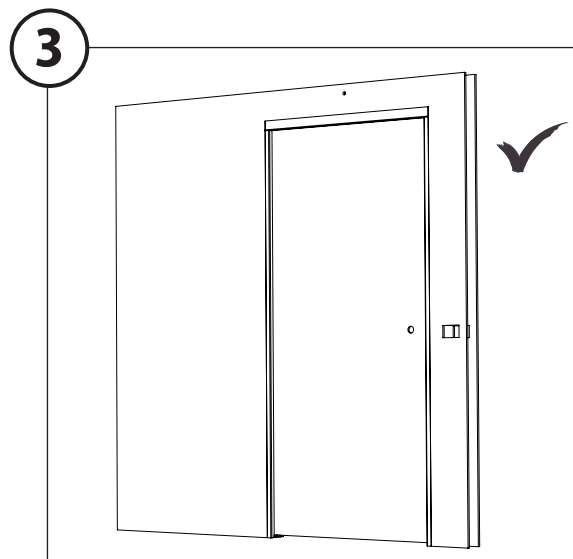
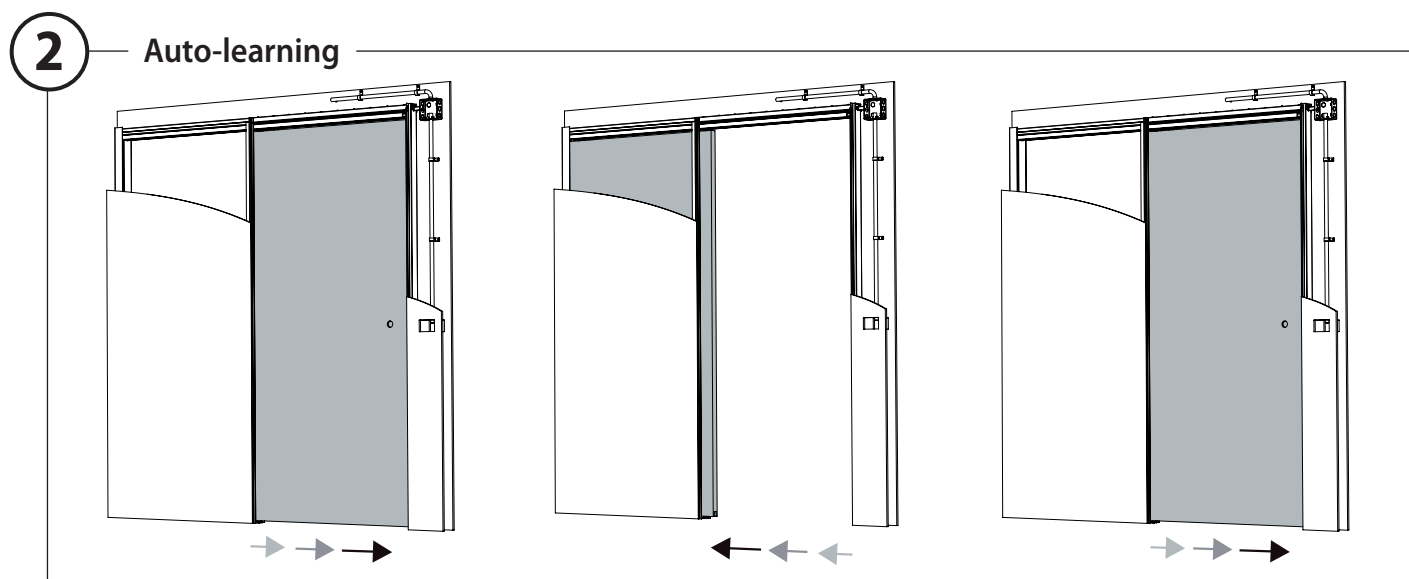
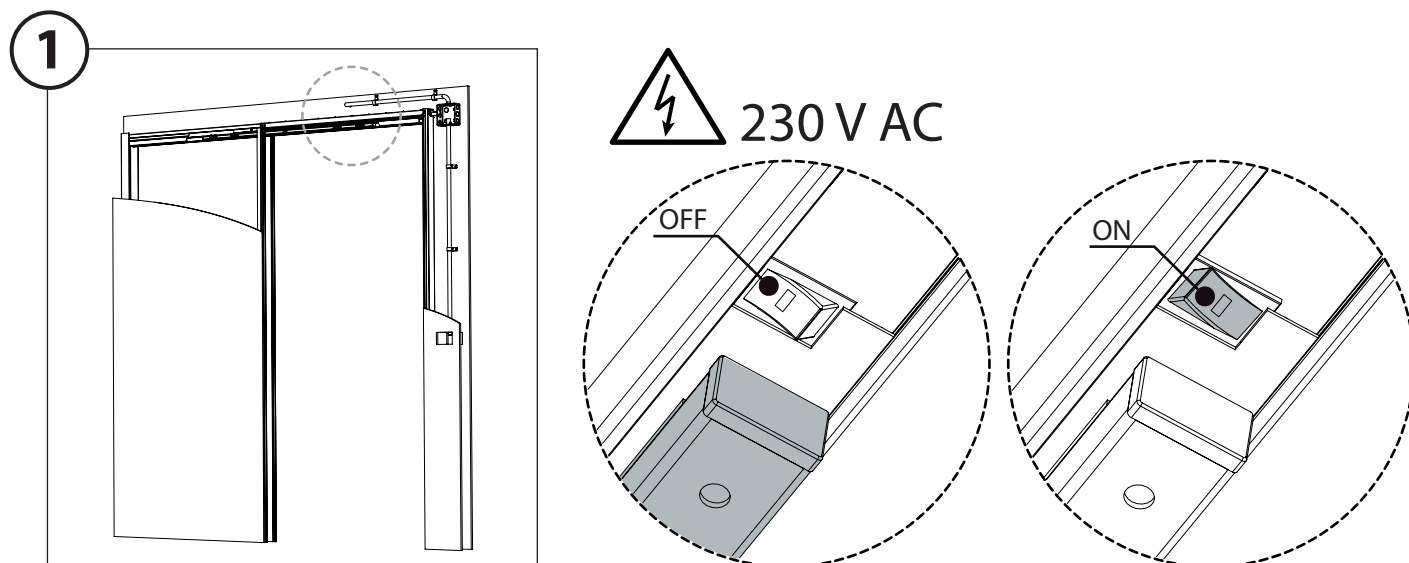
## 9b. GLASS DOOR INSTALLATION



## 9b. GLASS DOOR INSTALLATION



## 10. COMMISSIONING ON





OPERATING MANUAL, USE AND MAINTENANCE  
AUTOMATIC GUIDE E-MOTION



EC\_MAN\_IST\_020  
Rev. 2

## 1.5 FINAL CHECK AND CONFIGURATION

# To be completed by the installer

<input type="checkbox"/> <b>Auto learning</b>	_____
<input type="checkbox"/> <b>Basic functioning</b>	_____
<input type="checkbox"/> Automatic	_____
<input type="checkbox"/> Push & Go	_____
<input type="checkbox"/> Button	_____
<input type="checkbox"/> Button + 5 sec - Opened	_____
<input type="checkbox"/> <b>Complete functioning</b>	_____
<input type="checkbox"/> Automatic	_____
<input type="checkbox"/> Opened	_____
<input type="checkbox"/> Exit only	_____
<input type="checkbox"/> Door closed	_____
<input type="checkbox"/> <b>Regulations</b>	_____
<input type="checkbox"/> Force sensitivity while closing	_____
<input type="checkbox"/> Opening speed	_____
<input type="checkbox"/> Door opened time	_____
<input type="checkbox"/> <b>Sensors / Internal Radar</b>	_____
<input type="checkbox"/> Regular movement in control area	_____
<input type="checkbox"/> Regular presence in research area	_____
<input type="checkbox"/> Regulation time presence	_____
<input type="checkbox"/> <b>Proximity detector</b>	_____
<input type="checkbox"/> <b>Power failure</b>	_____
<input type="checkbox"/> The lock opens	_____
<input type="checkbox"/> It works manually	_____
<input type="checkbox"/> <b>Mechanic</b>	_____
<input type="checkbox"/> Interference with walls and/or fix verticals	_____
<input type="checkbox"/> Doors levelled and plumbed	_____
<input type="checkbox"/> Height between door and floor: 6 – 10 mm	_____
<input type="checkbox"/> Friction	_____
<input type="checkbox"/> <b>Cleaning</b>	_____
<input type="checkbox"/> <b>Note:</b>	_____
	_____
	_____
	_____

## 1.6 INSTALLATION DECLARATION OF CONFORMITY CE

# To be completed by the installer

## INSTALLATION DECLARATION OF CONFORMITY CE ( Directive 2006/42/CE - Directive on Machinery - )

Installer: \_\_\_\_\_

Address: \_\_\_\_\_

I declare: \_\_\_\_\_

Door description: \_\_\_\_\_

*(Model, type)*

Serial number: \_\_\_\_\_

Localization: \_\_\_\_\_

*(Client, address)*

- ☒ The product complies with the requirements of Directive on Machinery 2006/42/EC
- ☒ It complies with the provisions of the following other EEC directives:  
Electromagnetic Compatibility Legislation 2004/108/CE, as amended;  
Low Voltage Directive 2006/95/CE, as amended.
- ☒ I declare that the installation complies with all the specifications in this manual.
- ☒ I declare that the product passed the final functioning and safety check and that I informed the user about the product safe use instructions.

The following standard and national technical specifications and laws were applied:

- ☒ CEI 64-8 – Electrical installations with rated voltage not exceeding 1000V ac and 1500V dc

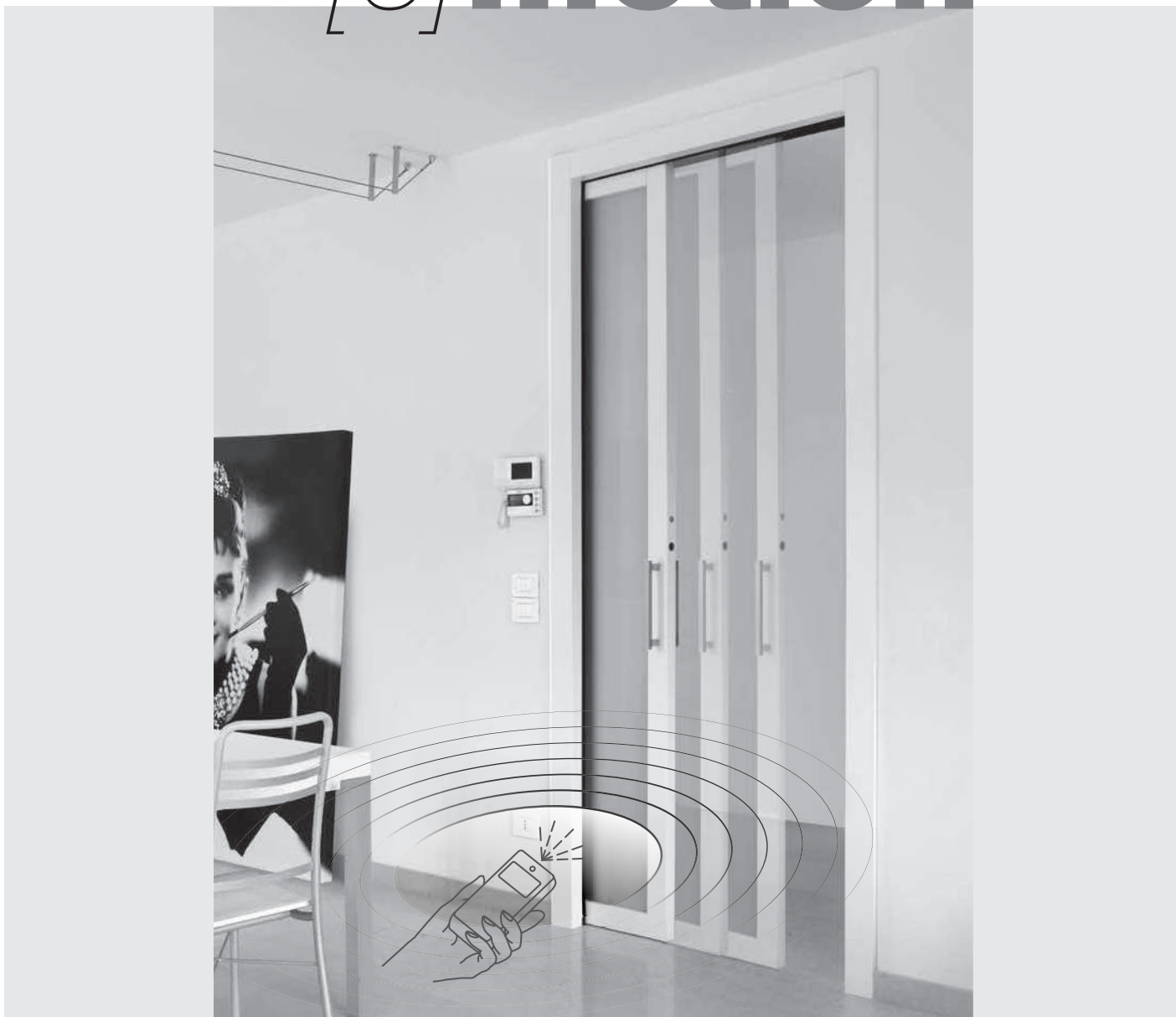
Date: \_\_\_\_\_

Installer signature, written legibly \_\_\_\_\_

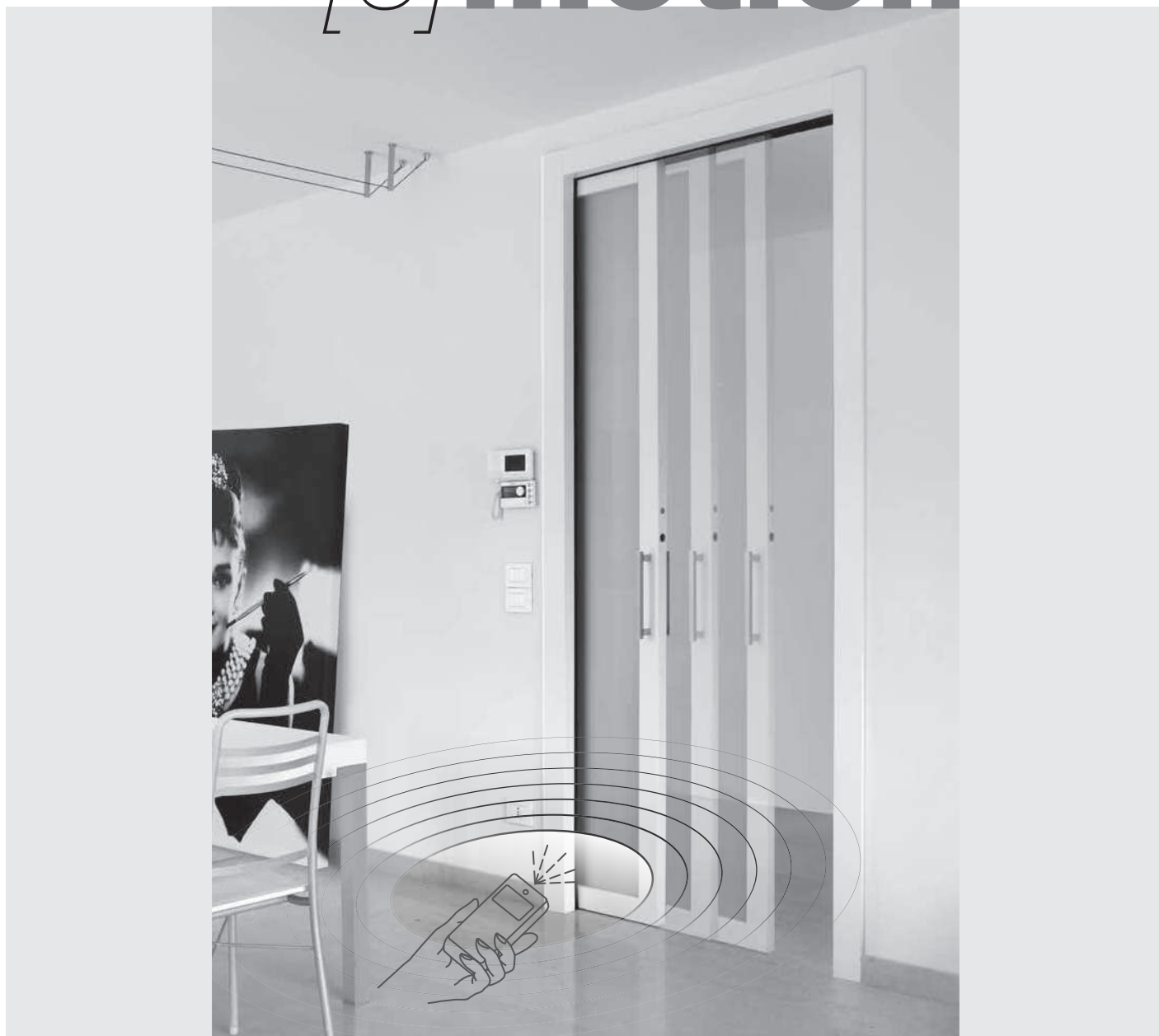
STAMP AND SIGNATURE OF THE INSTALLER

LABEL - MARK CE

# [e]motion



# [e]motion



## PART II

### Use and maintenance manual

Automatic guide E-Motion for a single automatic sliding door Pocket sliding system UNICO, LUCE SD, UNILATERALE, EWOLUTO®

# INDEX

2. 1	DETAILS.....	40
2. 2	RISK ANALYSIS.....	41
2. 3	USE INSTRUCTIONS .....	43
2. 4	MAINTENANCE.....	45
2. 5	PROBLEMS DETECTION AND SOLUTION .....	46
2. 6	TECHNICAL AND ASSISTENCE DATA .....	48
2. 7	CONFORMANCE STATEMENT .....	50

## 2. 1 DETAILS

This part of the manual is dedicated ONLY to the final user.



Maintenance operations that are not described in this part of the manual must be executed ONLY by qualified and competent technical staff with technical instruments provided of by the law in force in the installation country.

## 2.2 RISK ANALYSIS

### 2.2.1 DETAILS

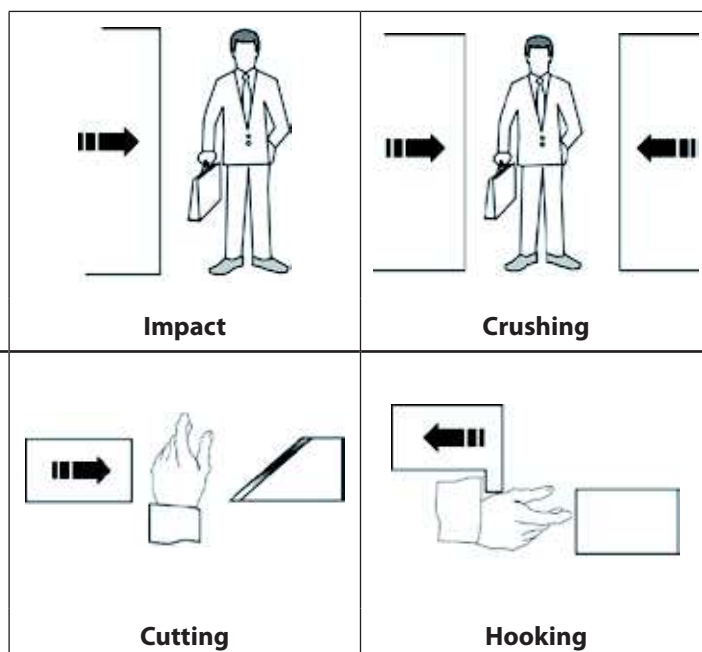
Sliding door risk zones (see photo)



Under the Directive on Machinery:

**“Danger zone”** means any zone within and/or around machinery in which a person is subject to a risk to his health or safety;

**“Exposed person”** means any person wholly or partially in a danger zone.



## 2. 2. 2 RESIDUAL RISKS



Even if E-Motion automatic guide has been designed and developed in order to have a safe functioning and even if all necessary protection measures has been taken, some residual risks may persist.

Automatic doors include crushing, cut and bruise risks. Depending on structural conditions, door version and safety measures, these risks may not be completely eliminated.

According to law prEN 16005 the area where an automatic sliding must always be protected in order to avoid, when it's possible, an impact with people. In order to eliminate these risks E-motion automatic guide takes these measures:

- Possible use of safety sensors, which detect the movement and presence of people and objects in the main closing edge.
- Mode "Low Energy". Depending on the door weight, the guide's speed while closing reduced to a prearranged value. This way the door's dynamic energy and the impact force are inferior to the values established by the Directive.
- In order to assure a high security level, most of all in installation where risk groups request it, E-motion automatic guide allows the simultaneous use of both previous solutions.

The qualified technical staff must verify the correct installation, connection, regulation and functioning of security sensors and/or Low Energy system, as expected from the law.

## 2.3 USE INSTRUCTIONS

### 2.3.1 CORRECT FUNCTIONING METHODS

E-motion automatic guide comes complete with all electronic driving and control elements of the motor, such as the cable/radio signal receiver and controller.

It includes the following characteristics:

❖ **Plug & Play**

E-motion is provided assembled and ready to be installed. You just need to connect the guide to the AC 230V power supply and push the "ON" button to set it going.

❖ **Self Setting**

E-motion has an electronic device that begins, at the first start, a Self-learning process composed of a complete cycle low speed. This process detects automatically the total course and the door weight parameters.

The values memorized by the electronic device automatically determine the open-close cycle of the door (speed and acceleration).

❖ **Adjustable**

Once the self-learning process is over, the qualified installer can make the following regulations:

- Opening speed
- Obstacle detection sensitivity
- How much time you want the door to remain opened (min. 0 sec / max. 20 sec).

### 2.3.2 FUNCTIONING TERMS

E-motion automatic guide has been designed to function as follows:

#### 2.3.2.1 BASIC FUNCTIONING:

**1. Automatic:**

With an impulse generated by one of the possible activation elements (button-radio control-radar etc.), the door makes a complete opening, remains opened for an adjustable time and starts the closing cycle.

**2. Push&Go:**

Applying a light manual push on the door (in the opening side), an open-close cycle starts automatically.

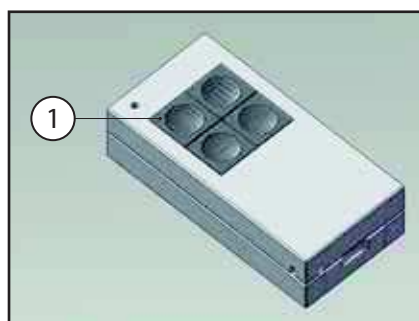
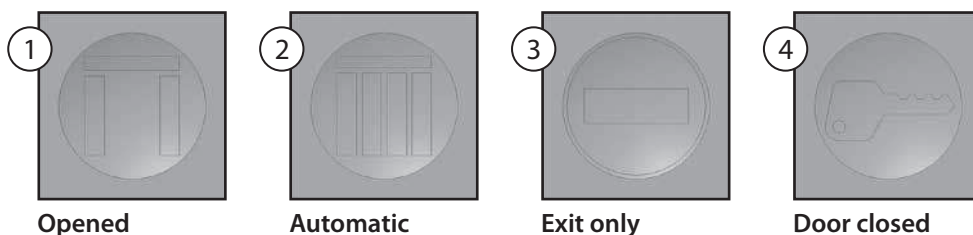
**3. Opened:**

Keeping the button pushed until the complete door, the door remains opened.

Pushing the button again the "automatic cycle" mode is re-established.

This mode allows the door to be opened and closed manually.

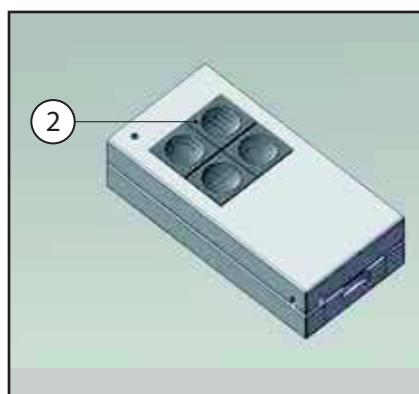
### 2.3.2.2 COMPLETE FUNCTIONING (with Remote Control and Electromechanical Block Optional)



#### 1. Opened:

Keeping the button 1 pushed until the door is completely opened, the door remains opened. This mode allows the door to be opened and closed manually.

"Opened" mode unlocks or cancels mode 3 "Exit only".

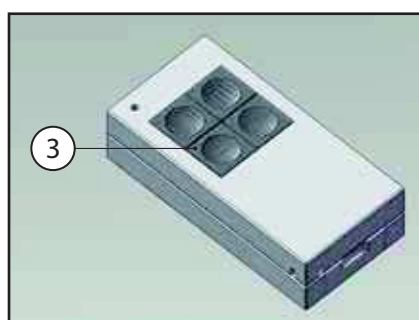


#### 2. Automatic:

Keeping the button 2 pushed the guide is in "Automatic" mode. With an impulse generated by one of the possible activation elements (button-radio control-radar etc.), the door makes a complete opening, remains opened for an adjustable time and starts the closing cycle. "Automatic" mode unlocks or cancels mode 1 "Opened", 3 "Exit only" and 4 "Door closed".

If you press the button "Opened" during the closing process, the door will not open until the first round of opening / closing is ended.

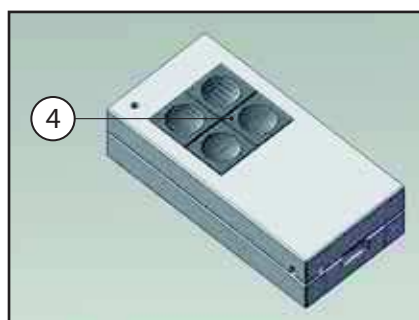
**2. 1. Push&Go:** Applying a light manual push on the door (in the opening side), an open-close cycle starts automatically.



#### 3. Exit only, with Electromechanical Block (Optional)

An electromechanical device automatically blocks the door. The door opens only with activation elements from the inside. Eventual external controls are inhibited.

To unlock push button 2 "Automatic".



#### 4. Closed door, with Electromechanical block (Optional)

Pushing button 4 "Door closed" an electromechanical device automatically blocks the door. It inhibits activation elements installed on the door (block all elements).

To unlock push button 2 "Automatic".

In case of power failure, for your safety, the device stops automatically and the door can be opened manually.

### 2.3.2.3 FUNCTIONING IN CASE OF POWER FAILURE

#### 1. Manual open

In case of power failure E-motion automatic guide allows the door to be opened manually just with a push, obtaining a simple opening.

### 2.3.3 USE RESTRICTION

It's useful to show, assist and advise the client on the correct use of internal sliding doors with E-motion automatic guide, if they are installed where there are people with physical, sensorial and mental reduced capacities, children and old people.

Do not allow children to play in the door passage, and keep the remote control out of their reach.

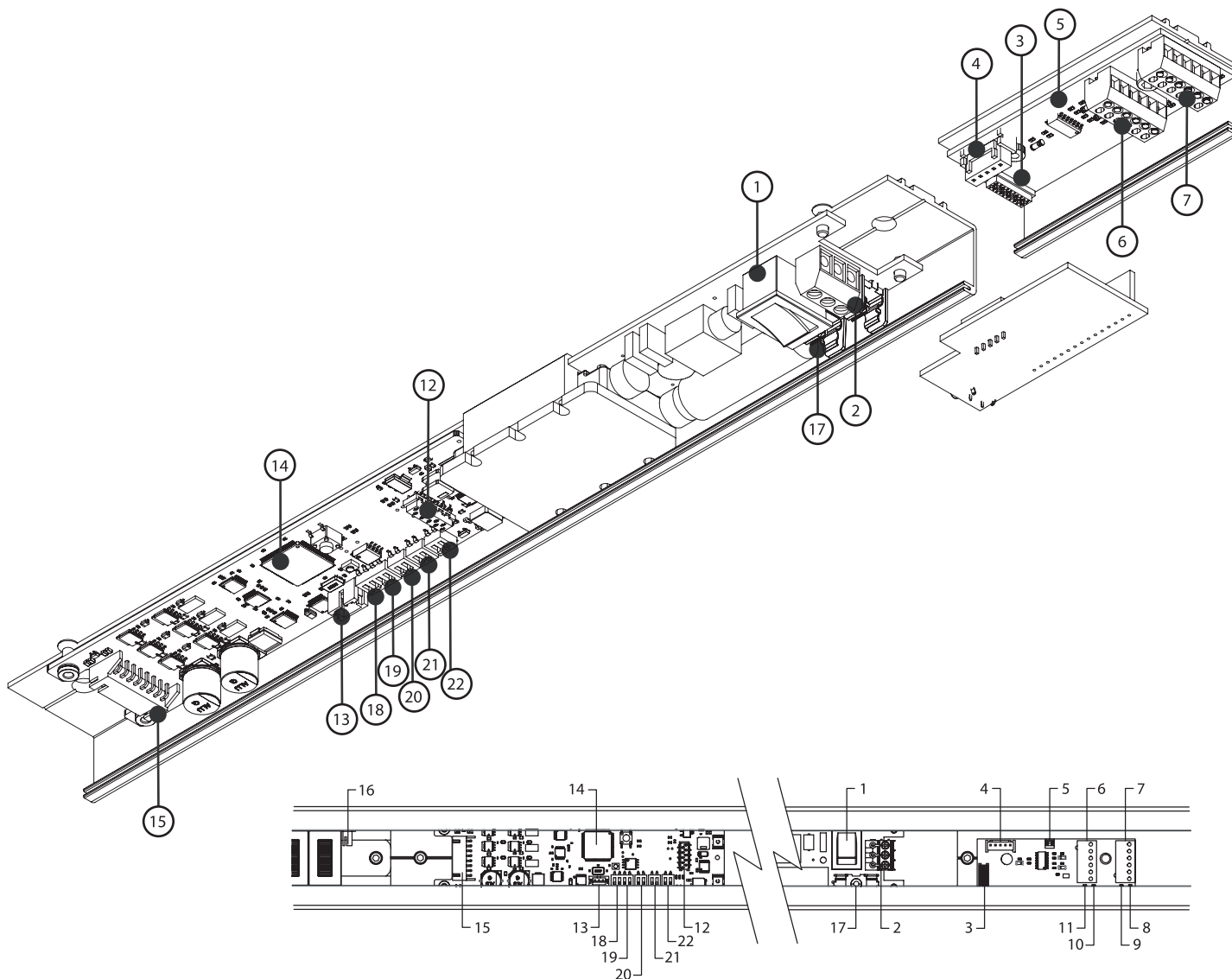
## 2.4 MAINTENANCE

The product doesn't need particular periodic maintenance operations. It's necessary, under the § 4.2 of prEN 16005 law, verifying at least once a year the correct functioning of the security devices.

## 2.5 PROBLEMI E SOLUZIONI

PROBLEM	POSSIBLE CAUSE	SOLUTION
"On / off" button light doesn't switch on.	The automatic guide isn't connected to the power grid (connector, direct terminal box, thermic connection / differential, etc.)	Control the connection and verify the correct voltage, 230V - 50Hz.
	Defective internal connection.	Control the internal connection. <b>IMPORTANT!</b> Carry out these operations with the guide disconnected!
	The fuse is burned.	Verify the fuse with a tester.
	The switch isn't on ON position.	Move the switch on ON position.
The door doesn't move and no light switches on.	The system isn't powered (internal failure).	Contact the technical staff.
The door doesn't move and the lights switch on in start-up sequence.	Defective motor connection.	Contact the technical staff, control internal connections between motor and control card.
The door doesn't move correctly (self-regulation).	The door is too heavy.	Change that door with a lighter one.
	The door installation is not correct (it isn't perpendicular to the floor, the guide produces friction on the floor, the floor is irregular...)	Verify that the door installation is correct.
	Defective motor connection.	Contact the technical staff, control internal connections between motor and control card.
	Control card malfunction (internal error)	Contact the technical staff.
	Irregular sliding functioning (wheel, track, dirt...)	Control the correct sliding moving the door manually.
The door doesn't move correctly (DOOR MODE)	Self-regulation has not been executed correctly.	Repeat self-regulation.
	There is an obstacle.	Remove the obstacle.
	There is no obstacle.	Regulate sensitivity.

PROBLEM	POSSIBLE CAUSE	SOLUTION
Sending a signal by an external device (accessories) the door doesn't open and in the controller card the green light doesn't switches on.	The internal signal is defective.	Verify the connection card and the control card connection.  Verify that the guide is on Mode that activates the door with the accessories.
	Receiver module RF is not correctly connected.	Control the RF module connection.
The automatic guide doesn't respond to remote control's signals.	RF module is not inserted.	Insert RF module.
	Defective receiver.	Replace the RF receiver module
	RF module didn't register the remote control.	Register remote control on RF module.
	Remote control doesn't send signal.	Replace the remote control batteries.



- 1 ON/OFF Button
- 2 Power supply input 220V-50 Hz
- 3 Accessories circuit connection
- 4 RF receiver connection
- 5 Domotics connection (reserved)
- 6 External radar and lock connection
- 7 Internal radar and buttons connection
- 8 Green led (internal radar signal active)

- 9 Orange led (button signal active)
- 10 Green led (external radar signal active)
- 11 Red led (lock signal active)
- 12 Accessories circuit connection
- 13 PC connection (reserved)
- 14 Microprocessor
- 15 Motor/ receiver connection
- 16 Motor/ receiver connection

- 17 Protection fuse 2 A
- 18 Operation
- 19 Regulation of opening speed
- 20 Regulation of closing sensitivity force
- 21 Regulation of door opened time
- 22 Dip switches (door Weight)

## 2.6 TECHNICAL AND ASSISTANCE DATA



USE AND MAINTENANCE MANUAL  
AUTOMATIC GUIDE E-MOTION



EC\_MAN\_IST\_021  
Rev. 1

## ELECTRIC CHARACTERISTICS

### Power supply

Voltage	<b>230 V AC</b>
Power	<b>150 W</b>
Intensity	<b>0,75 A</b>
Frequency	<b>50/60 Hz</b>

### Normative



2006/42/CE  
2004/108/CE  
2006/95/CE  
EN 60335

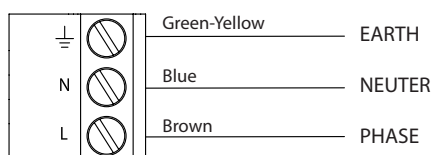
### Linear Motor

Type:	<b>"PMSM" Permanent magnet synchronous motor</b> <b>Iron core. 3 Phases - 4 Poles - 24 V</b>			
Magnets:	<b>Neodymium 35 H</b>		<b>Pitch Pole 25 mm</b>	
Consumption:	<b>Peak</b>	<b>150 W</b>	<b>Force:</b>	<b>80 N</b>
	<b>Medium</b>	<b>80 W</b>	<b>IP:</b>	<b>IP 22</b>
	<b>Stand-By</b>	<b>15 W</b>	<b>Class:</b>	<b>I</b>

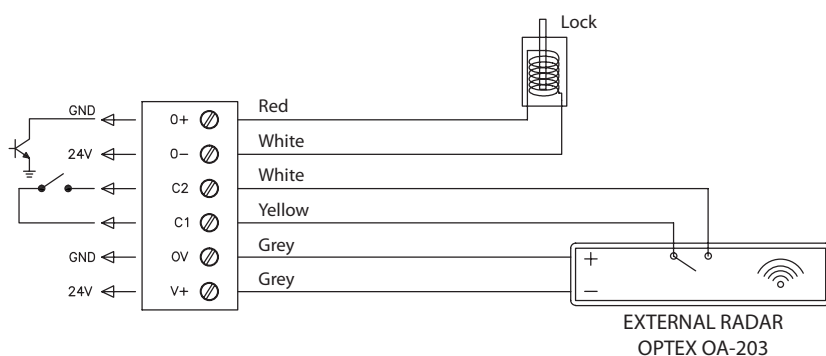
### Accessories

Power:	<b>25 W</b>	Power supply	<b>24 V DC</b>
		Consumption	<b>1 A</b>

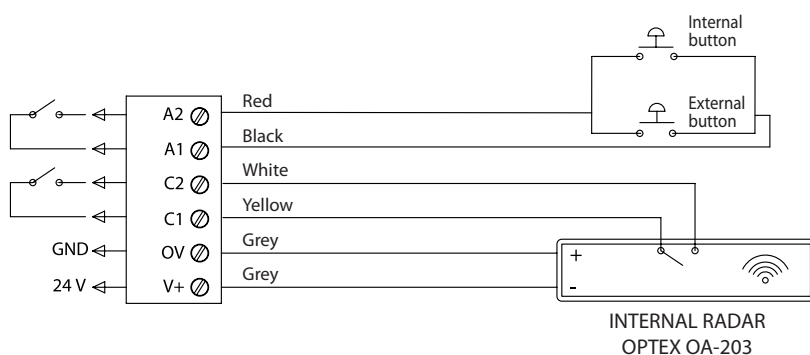
## ② → POWER SUPPLY INPUT



## ⑥ → EXTERNAL RADAR AND LOCK CONNECTION



## ⑦ → INTERNAL RADAR AND BUTTON CONNECTION



## 2.7 CONFORMANCE STATEMENT



### CONFORMANCE STATEMENT (Directive 2006/42/CE - Directive on Machinery)

I declare, under my own supervision, that the described model and product possess the essential health and safety requirements as expected in the following directives for the law harmonisation at European Union level:

Product: Automatic guide for internal sliding door

Model: E-motion

Serial Number: Starts with 00

Producer: Eclisse S. r. l.  
Via Sernaglia, 76  
31053 Pieve di Soligo  
Treviso – Italia

Laws: Directive 2006/42/CE – “Directive on Machinery”

- EN ISO 12100-1
- EN ISO 12100-2
- EN ISO 13857
- EN ISO 14121-1

Directive 2004/108/CE – “Electromagnetic Compatibility (EMC) Directive”.\*

- EN 61000: 3-2
- EN 61000: 3-3
- EN 61000: 6-1 2002
- EN 61000: 6-3 2002

Directive 2006/95/CE – “Low Voltage Directive (LVD)”.\*

- EN 60335-1
- EN 60335-2/103

Designer:  
Ing. Oriol Guilera

Legal Representative:  
Sig. Luigi De Faveri

\* Laboratorio Ensayos: IDNEO  
Polígono Industrial Can Mitjans s/n  
08232 Viladecavalls - Barcelona – España

